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Re: ArthroCare Corporation v. Smith & Nephew C.A. No. 01-504 (SLR)

Dear Dr. Dalleo:

mode to DI#

Enclosed are an original and copy of ArthroCare's Corrected Answering Brief In Opposition To Smith & Nephew's Opening Brief In Support Of Its Inequitable Conduct Case. This corrected brief contains corrections to certain case citations, as well as a corrected Table of Contents and Table of Authorities.

Respectfully

draven hacers de

/cbh

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ORIGINAL

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE



ARTHROCARE CORPORATION,)	
Plaintiff,)	•
v.	,)	C.A. No. 01-504 (SLR)
SMITH & NEPHEW, INC.,)	
Defendant.)	

ARTHROCARE'S CORRECTED ANSWERING BRIEF IN OPPOSITIONTO SMITH & NEPHEW'S OPENING BRIEF IN SUPPORT OF ITS INEQUITABLE CONDUCT CASE

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July 11, 2003

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NATURE AND STAGE OF THE PROCEEDING

Plaintiff ArthroCare Corporation ("ArthroCare") filed this action on July 25, 2001, alleging infringement of United States Patent Nos. 5,697,536 ("the '536 patent"), 5,697,882 ("the '882 patent"), and 6,224,592 B1 ("the '592 patent"). Defendant Smith & Nephew, Inc. ("Smith & Nephew") asserted defenses of non-infringement and invalidity of all three patents, and unenforceability of the '592 patent for inequitable conduct. At the pre-trial conference, Smith & Nephew sought to assert an additional allegation of inequitable conduct with respect to the reexamination of the '536 patent.

The Court allotted each side 16 hours to present its case at trial, including any evidence relating to inequitable conduct. (Tr. at 107). Smith & Nephew used all of its 16 hours – and an additional half-hour it requested (Tr. at 1287) – during the seven-day jury trial. On May 12, 2003, the jury rendered a verdict that all of the asserted claims of the '536, '882, and '592 patents were infringed and not invalid. That same day, the Court denied Smith & Nephew's request for additional time to present evidence on inequitable conduct, but allowed Smith & Nephew to brief the issue on the record made at trial: "If you want to brief inequitable conduct on the record made at trial, you certainly may. But we are not going to open the record for purposes of inequitable conduct." (Tr. at 1702.)

On June 9, 2003, Smith & Nephew filed its Opening Brief in Support of Its Inequitable Conduct Case. That brief asserts ten new theories of inequitable conduct that Smith & Nephew had never previously asserted, including allegations of inequitable conduct relating to the '882 patent and allegations of infectious unenforceability. The brief also cites extensively to evidence that is not in the trial record.

There is no evidence — much less clear and convincing evidence — of inequitable conduct.

Smith & Nephew cannot point to any material misrepresentations or omissions. To the contrary,

ArthroCare's patent attorneys - John Raffle and Sanjay Bagade - made full disclosures to the Patent Office, including disclosure of Smith & Nephew's invalidity contentions from this litigation during the '536 reexamination. Moreover, the record is completely devoid of evidence of intent to deceive. Accordingly, ArthroCare respectfully requests that the Court enter judgment of no inequitable conduct.

SUMMARY OF ARGUMENT

Smith & Nephew's allegations of inequitable conduct must fail for at least the following reasons:

- 1: The record at trial is entirely insufficient to support Smith & Nephew's inequitable conduct allegations. As a result, Smith & Nephew's "case" is based largely on speculation, unfounded inference, and attorney argument. The evidence simply does not clearly and convincingly show that those involved with patent prosecution withheld material information from the Patent Office, made material misrepresentations, or had any intent to deceive the examiners of the patents-in-suit.
- 2. In its Opening Brief, Smith & Nephew presents no less than 10 entirely new theories of inequitable conduct and relies on alleged evidence outside the trial record. Because these new allegations violate the Federal Rules of Civil Procedure, are unfair, and would cause ArthroCare extreme prejudice, and because ArthroCare had no opportunity to present evidence rebutting these new theories at trial, they should not be considered by the Court. Similarly, Smith & Nephew should not be permitted to rely upon evidence outside the trial record.
- 3. Smith & Nephew's allegations with respect to the '592 patent are contradicted by the evidence, are based upon impermissible inferences, and rely on the very same arguments regarding the materiality of the prior art that were explicitly rejected by the Patent Office, this

Court, and the jury. The Roos '198 patent cannot form the basis for an inequitable conduct charge because Mr. Raffle disclosed that reference to the Patent Office and Mr. Raffle was under no obligation to point out particular pages in the reference to the Examiner. Moreover, Smith & Nephew has not offered a shred of evidence that Mr. Raffle believed the arguments he made to the Examiner about the Roos '198 patent were false. Similarly, Smith & Nephew has not shown, and cannot show, that Mr. Raffle committed inequitable conduct with respect to Judge Orrick's interlocutory, preliminary injunction decision in the Ethicon case. Mr. Raffle identified the decision for the Examiner, described it as one of the documents that reflected the parties' primary validity and enforceability positions, and offered to provide a copy to the Examiner. These facts undercut any argument that ArthroCare intended to deceive the Patent Office.

- 4. Smith & Nephew complains that it was inequitable conduct for ArthroCare not to disclose certain of Smith & Nephew's papers from this lawsuit (summary judgment briefs, Taylor expert report, Roos declaration) during the '536 reexamination. These documents, however, were merely litigation-motivated "explanations" of prior art references and contentions, all of which ArthroCare had provided to the examiner. As such, the documents were not material and were cumulative to submitted information. Moreover, there is no evidence that anyone involved with the '536 reexamination had possession of these documents, thereby undermining Smith & Nephew's charge that they were improperly withheld.
- 5. Smith & Nephew's allegations regarding the '882 patent's Certificates of Correction seek to transform mere elerical and typographical errors into fraud on the Patent Office. The jury found that the errors in the claims as originally issued were elerical or typographical. As a result, corrections to those errors that broadened the claim were perfectly proper. Moreover, changing "active electrode" to "electrode terminal" simply is not material.

because the Court's construction of those terms and the testimony at trial demonstrates that the terms are used interchangeably. Smith & Nephew's argument that Mr. Raffle was motivated to change "active electrode" to "electrode terminal" in order to cover Ethicon's product is unfounded. Not only is there no evidence supporting it, but it is inconsistent with the fact that Mr. Raffle did not correct another claim that contained the same error.

6. Smith & Nephew's new charges of infectious inequitable conduct fall well short of the legal standard required to render the patents-in-suit unenforceable. Smith & Nephew has not established an immediate and necessary relation between the alleged inequitable conduct with respect to any patent and enforcement of any other patent. Nor do Smith & Nephew's allegations of inequitable conduct rise to the level of unconscionability required to support infectious unenforceability. Moreover, Smith & Nephew offers no support for its theory that later acts of alleged inequitable conduct can retroactively infect previously issued patents.

STATEMENT OF FACTS

The relevant facts are set forth in the Argument sections, as appropriate.

ARGUMENT

I. SMITH & NEPHEW'S NEW INEQUITABLE CONDUCT ALLEGATIONS AND RELIANCE ON EVIDENCE NOT IN THE RECORD SHOULD BE REJECTED.

Smith & Nephew first pleaded its inequitable conduct defense in its September 13, 2001

Answer and Counterclaims. (D.I. 10.) That defense consisted of only two allegations — both directed solely to the '592 patent. The first was that the applicants did not tell the Examiner that claim 1 of the Roos '198 patent disclosed the use of electrically conductive fluid. (D.I. 10 W 15-26.) The second was that the applicants did not tell the Examiner that Judge Orrick had found that the Roos '198 patent disclosed the use of conductive fluid in his December 2, 1998

Memorandum in the ArthroCare v. Ethicon lititation. (Id.)

On March 26, 2003, some five months after fact discovery closed, Smith & Nephew supplemented its response to ArthroCare's interrogatory that sought the bases for Smith & Nephew's inequitable conduct contentions. In doing so, Smith & Nephew added the new assertion that, during the reexamination of the '536 patent, ArthroCare committed inequitable conduct by not submitting to the Patent Office Smith & Nephew's invalidity expert reports and summary judgment briefs from this litigation.

On June 9, 2003, four weeks after the end of trial, Smith & Nephew submitted its Opening Brief, which includes ten new allegations of inequitable conduct that were never raised before or during trial:

- With respect to the '592 patent, Smith & Nephew claims that Mr. Raffle
 committed inequitable conduct by failing to disclose that the Roos article
 described the use of one of the devices disclosed in the Roos '198 patent
 in 32 successful surgeries and that the Roos article explicitly described the
 irrigation liquid as facilitating the passage of electrical current. (D.I. 442
 at 16.)
- With respect to the '592 patent, Smith & Nephew claims that Mr. Raffle committed inequitable conduct by not telling the Examiner that Judge Ortick had previously rejected ArthroCare's arguments on the Roos '667 patent. (D.I. 442 at 16.)
- With respect to the reexamination of the '536 patent, Smith & Nephew claims that ArthroCare committed inequitable conduct by failing to disclose the Roos Declaration. (D.I. 442 at 3, 21.)
- With respect to the reexamination of the '536 patent, Smith & Nephew claims that Mr. Raffle convinced the Examiner to simply parnot back arguments that Mr. Raffle had previously made with respect to the Roos '198 patent during prosecution of the '592 patent without performing any independent analysis. (D.I. 442 at 4, 21-22.)
- With respect to the '882 patent, Smith & Nephew claims that Mr. Raffle
 committed inequitable conduct by falsely asserting that "[alpplicant
 amended all of the claims to replace the term 'active electrode' with
 'electrode terminal." (D.I. 442 at 29-31.)

- With respect to the '882 patent, Smith & Nephew claims that Mr. Raffle committed inequitable conduct by failing to point out that there were other instances where there was an improper antecedent basis that was purportedly acceptable to ArthroCare. (D.I. 442 at 31-32.)
- With respect to the '882 patent, Smith & Nephew claims that Mr. Raffle committed inequitable conduct by failing to explain that the Certificate of Correction would broaden the scope of claim 1. (D.I. 442 at 32-35.)
- Smith & Nephew claims that ArthroCare's supposed inequitable conduct with respect to the '592 patent renders the '882 and '536 patents unenforceable because the alleged misrepresentation about the significance of the Roos '198 patent to the '592 patent makes it less likely that the '882 and '536 patents will be subject to reexamination, and has the potential to taint the reexamination of the '882 and '536 patents. (D.I. 442 at 38.)
- Smith & Nephew claims that ArthroCare's failure to provide Smith & Nephew's litigation-related documents in the '536 reexamination renders the '592 and '882 patents unenforceable because those documents provide information concerning prior art references that are material to the '592 and '882 patents. (D.I. 442 at 39.)
- Smith & Nephew claims that ArthroCare's inequitable conduct with respect to the '882 certificates of correction infects the '592 and '536 patents because all three patents use the terms "active electrode" and "electrode terminal." (D.I. 442 at 39.)

In addition to asserting entirely new inequitable conduct allegations, Smith & Nephew also relies extensively on documents that are not in the trial record, e.g., Judge Ortick's opinion, Smith & Nephew's expert reports, and the Roos Declaration.

The Court should not permit Smith & Nephew to assert any of these new inequitable conduct allegations. Allowing Smith & Nephew to make these new arguments post-trial would be extremely prejudicial to ArthroCare. It is beyond dispute that ArthroCare did not receive any notice of these theories before or during trial. As a result, ArthroCare had no opportunity to introduce evidence at trial to rebut them. This is exactly the kind of prejudice the Federal Rules of Civil Procedure are designed to prevent. See ATD Corp. v. Lydall, Inc., 159 F.3d 534, 550-51

(Fed. Cir. 1998) (affirming trial court's exercise of discretion to preclude accused infringer "from relying on theories not made available or not disclosed to the opposing side"); Commissioner v. Transport Mfg. & Equip. Co., 478 F.2d 731, 736 (8th Cir. 1973) (affirming exclusion of theories first raised in post trial briefs due to surprise, disadvantage, and substantial prejudice to defendant). \(^1\)

Smith & Nephew's claim that "[t]he issues related to the '592 and '536 patents were previously pled" (D.I. 442 at 3) is simply incorrect. It is well-established that inequitable conduct must be pleaded with particularity under Federal Rule of Civil Procedure 9(b). "Thus, in pleading an inequitable conduct claim, a party cannot merely rely on vague allegations that broadly recite the elements of fraud, but instead must either specify the time, place, and content of any alleged misrepresentations made to the PTO or otherwise 'give the [opposing party] notice of the precise misconduct alleged." Agere Sys. Guardian Corp. v. Proxim, Inc., 190 F. Supp. 2d 726, 734 (D. Del. 2002) (citing EMC Corp. v. Storage Tech. Corp., 921 F. Supp. 1261, 1263 (D. Del. 1996)). Before trial, Smith & Nephew asserted only three allegations of inequitable conduct with any specificity – two in its Answer and one in its supplemental interrogatory response. Smith & Nephew's remaining allegations concerning the '592 and '536 patents were asserted for the first time nearly a month after trial in its Opening Brief.

Similarly, Smith & Nephew's claim that its inequitable conduct allegations concerning the '882 patent are based on the testimony that came out at trial (D.I. 442 at 3) is wrong. All of the facts upon which Smith & Nephew bases these allegations are found expressly in the

Smith & Nephew has not made any showing that its new theories are proper under the Federal Rules of Civil Procedure. (D.1.442 at 10 n.4.) Rule 15 requires a showing that justice requires the amendment to the pleadings and that ArthroCare will not be prejudiced – neither has been shown here. In addition, Rhone-Poulenc Agro S.A. v. Monsanto Co., 73 F. Supp. 2d 537 (M.D.N.C. 1999), is inapposite. The pleadings there were amended at the close of discovery, not after trial.

prosecution history of the '882 patent. Mr. Raffle's and Dr. Goldberg's trial testimony did not add any additional facts beyond what was in the prosecution history. For example, Smith & Nephew supports its position by pointing to the testimony of Mr. Raffle regarding the replacement of "active electrode" with "electrode terminal" in claims 1 and 26. (D.I. 442 at 30-31.) Mr. Raffle's trial testimony, however, merely confirms the content of the prosecution history. Moreover, Smith & Nephew does not even argue that its new infectious unenforceability allegations were pleaded previously² or were based on "new evidence" discovered at trial.

In addition, Smith & Nephew's attempts to rely on documents that are not in the record - Judge Orrick's opinion, Dr. Taylor's expert report, and the Roos Declaration - should be rejected. Notwithstanding this Court's ruling that the trial record was closed on May 9, 2003, Smith & Nephew relies on seven exhibits not in the trial record. (D.f. 443, Exs. A, D, J, K, L, Q and R.) Those exhibits should not be considered. See ATD Corp., 159 F.3d at 550-551 (the purpose of the patent law's notice requirements and of the Federal Rules "is to prevent unfair and prejudicial surprise, not to facilitate last-minute production of evidence"); Union Carbide Chems. & Plastics Tech. Corp. v. Shell Oil Co., 163 F. Supp. 2d 426, 457 (D. Del. 2001) (deeming inequitable conduct defense waived because patentee was unable to present its evidence, noting that "(b)oth sides are entitled to present and rebut evidence on this issue"), aff'd in part, rev'd in part on other grounds, 308 F.3d 1167 (Fed. Cir. 2002).

Like allegations of inequitable conduct generally, allegations of infectious unenforceability must also be pleaded with particularity under Rule 9(b). See Ronald A. Katz Tech. Licensing, L.P. v. Verison Communications Inc., No. Civ. A. 01-5627, 2002 WL 1565483, at *1-3 (E.D. Pa. July 16, 2002) (striking claim for infectious unenforceability for failure to plead with particularity under Rule 9(b)).

Smith & Nephew's new inequitable conduct allegations and attempts to rely on evidence not in the record should be rejected.

II. THERE IS NO EVIDENCE THAT ANY OF THE PATENTS-IN-SUIT WERE PROCURED THROUGH INEQUITABLE CONDUCT.

A. The Legal Standards For Inequitable Conduct.

"A party seeking to have a patent declared unenforceable has a heavy burden to meet." Hoffmann-La Roche, Inc. v. Promega Corp., 323 F.3d 1354, 1359 (Fed. Cir. 2003). "Inequitable conduct requires misrepresentation or omission of a material fact, together with an intent to deceive the PTO. Both of those distinct elements must be shown by clear and convincing evidence." Id.

Inequitable conduct entails a two-step analysis. Juicy Whip, Inc. v. Orange Bang Inc., 292 F.3d 728, 744 (Fed. Cir.), cert. denied, 123 S.Ct. 537 (2002). First, the accused infinger must present clear and convincing evidence that the misrepresented or omitted information is material and not cumulative to information already in the record and that the applicant acted with intent to deceive the Patent Office. Id. at 744. Even if there is clear and convincing evidence of both materiality and intent to deceive, there still may be no inequitable conduct. The court must then perform the second step of the analysis, which is to weigh "the materiality and intent in light of all the circumstances to determine whether the applicant's conduct is so culpable that the patent should be unenforceable." Id.

Information is not material if it is cumulative to information already provided to the examiner. See Upjohn Co. v. MOVA Pharm. Corp., 225 F.3d 1306, 1312 (Fed. Cir. 2000) ("a reference need not be provided to the examiner if it is merely cumulative to or less material than other references before the examiner"). An accused infringer must do more than show materiality is "a debatable factual question," it must prove materiality of the withheld

information by clear and convincing evidence. See Tegal Corp. v. Tokyo Electron Am., Inc., 257
F.3d 1331, 1349-50 (Fed. Cir. 2001), cert. denied, 535 U.S. 927 (2002) (affirming a finding of no inequitable conduct despite acknowledging "that whether the [withheld] reference is cumulative is a debatable factual question"). A determination of materiality "require[s] a detailed factual analysis of the relevance of the teachings of that reference both with respect to the claims of the patents-in-suit and with respect to the other prior art references that were before the examiner." Dayco Prods. v. Total Containment, Inc., 329 F.3d 1358, 1367 (Fed. Cir. 2003).

To prove intent to deceive, an accused infringer cannot simply point to an applicant's failure to comply with Patent Office rules:

[T]he alleged conduct must not amount merely to the improper performance of, or omission of, an act one ought to have performed. Rather, clear and convincing evidence must prove that an applicant had the specific intent to accomplish an act that an applicant ought not to have performed, viz., misleading or deceiving the PTO. In a case involving nondisclosure of information, clear and convincing evidence must show that the applicant made a deliberate decision to withhold a known material reference.

Molins PLC v. Textron, 48 F.3d 1172, 1181 (Fed. Cir. 1995). Although intent to deceive may be inferred, it must be inferred from the evidence — "[c]onjecture alone is not sufficient to show an intent to deceive to support the defense of inequitable conduct." In re Hayes Microcomputer Prods., Inc. Patent Litig., 982 F.2d 1527, 1546 (Fed. Cir. 1992). Intent to deceive cannot be inferred simply from the materiality of the withheld or misrepresented information. See Amgen Inc. v. Hoechst Marion Roussel, Inc., 314 F.3d 1313, 1358 (Fed. Cir. 2003) ("[Majateriality does not presume intent, which is a separate and essential component of inequitable conduct.");

Accordingly, Smith & Nephew's argument that "[i]ntent may be inferred from clear materiality" (D.I. 442 at 8) is wrong. A case upon which Smith & Nephew relies, Brasseler, U.S.A. I., L.P. v. Stryker Sales Corp., 267 F.3d 1370 (Fed. Cir. 2001), is to the contrary. There, the Federal Circuit emphasized that an inference of deceptive intent depends on the particular facts of the case. Id. at 1375-76.

Hoffmann-La Roche, 323 F.3d at 1359 (intent and materiality are "distinct elements," both of which "must be shown by clear and convincing evidence"). Moreover, "[i]ntent to deceive cannot be inferred simply from the decision to withhold the reference where the reasons given for the withholding are plausible." Dayco, 329 F.3d at 1367.

When assessing intent to deceive, a court must always consider evidence of the applicant's good faith. Li Second Family L.P. v. Toshiba Corp., 231 F.3d 1373, 1381 (Fed. Cir. 2000), cert. denied, 533 U.S. 929 (2001). Indeed, evidence of good faith, such as disclosure to the Patent Office of the information in dispute, will_rebut an inference of intent to deceive. Akron Polymer Container Corp. v. Exzel Container, Inc., 148 F.3d 1380, 1384 (Fed. Cir. 1998).

In the absence of a threshold finding of either materiality or intent to deceive, no further analysis need be performed and the inequitable conduct allegation must be rejected. Monon Corp. v. Stoughton Trailers, Inc., 239 F.3d 1253, 1261 (Fed. Cir. 2001); Amgen, 314 F.3d at 1358 ("[T]]here must be some threshold showing of intent . . .; we will not find inequitable conduct on an evidentiary record that is completely devoid of evidence of the patentee's intent to deceive the PTO.")

The Federal Circuit has called the inequitable conduct defense "an absolute plague" on the patent system:

[T]he habit of charging inequitable conduct in almost every major patent case has become an absolute plague. Reputable lawyers seem to feel compelled to make the charge against other reputable lawyers on the slenderest grounds... They get anywhere with the accusation in but a small percentage of the cases, but such charges are not inconsequential on that account. They destroy the respect for one another's integrity, for being fellow members of an honorable profession, that used to make the bar a valuable help to the courts in making a sound disposition of their cases, and to sustain the good name of the bar itself. A patent litigant should be made to feel, therefore, that an unsupported charge of "inequitable conduct in the Patent Office" is a negative contribution to the rightful administration of justice.

Burlington Indus., Inc. v. Dayco Corp., 849 F.2d 1418, 1422 (Fed. Cir. 1988). "[U]njustified accusations of inequitable conduct are offensive and unprofessional [and] should be condemned." Molins, 48 F.3d at 1182. The Federal Circuit has even upheld an award of sanctions for multiplying the proceedings unreasonably and vexatiously by pursuing a baseless charge of inequitable conduct. See Fiskars Inc. v. Hunt Mfg. Co., 221 F.3d 1318, 1328 (Fed. Cir. 2000), cert. denied, 532 U.S. 972 (2001). "Inequitable conduct charges are disfavored by this court" Eaton Corp. v. Parker-Hannifin Corp., No. Civ. A. 00-751-SLR, 2003 WL 179992, at *1 (D. Del. Jan. 24, 2003).

Smith & Nephew's unjustified accusations of inequitable conduct in this case are clear examples of why the courts disfavor such charges.

B. There Is No Evidence That The '592 Patent Was Procured Through Inequitable Conduct.

ArthroCare's counsel, John Raffle, filed the application that eventually issued as the '592 patent on June 16, 1998, and it was assigned to Primary Examiner Lee Cohen for examination. Along with the application, Mr. Raffle submitted an Information Disclosure Statement that disclosed a number of references, including the Roos '198 patent and the Roos article. (DTX 300-301, A-2, A-29-A-49.) On October 20, 1999, Mr. Raffle submitted a Supplemental Information Disclosure Statement to bring the Ethicon litigation and documents from that litigation to the Examiner's attention. (DTX 300, A-3-A-12.) Mr. Raffle explained that he had recently been apprised by a third party of M.P.E.P. § 2001.06(c), that he had already submitted the prior art that was principally relied upon by the accused infringers in Ethicon, and that he was

Portions of the "592 prosecution history (DTX 300-302) are attached at Ex. A at pp. A-1-A-54, portions of the '536 reexamination prosecution history (PX 7) are attached at Ex. B. and portions of the '882 prosecution history (DTX 306) are attached at Ex. C at pp. C-1-C-17.

providing a list of materials from Ethicon that reflected the parties' primary invalidity and enforceability arguments (including Judge Orrick's interlocutory opinion at number 40).

Mr. Raffle offered to provide the Examiner with any of the listed materials. (DTX 300, A-3-A-12.)

On February 20, 2000, Examiner Cohen issued a rejection of a number of the pending claims in the application based on the Roos '198 patent. (DTX 301, A-16-A-20.) Mr. Raffle responded on May 25, 2000, arguing that the Roos '198 patent did not disclose "electrically conductive fluid." (DTX 301, A-21-A-28.) Examiner Cohen then withdrew his rejection based on the Roos '198 patent (DTX 301, A-50-A-53), and ultimately allowed the application to issue as the '592 patent (DTX 301, A-54).

 Mr. Raffle's submission of and arguments regarding the Roos '198 patent cannot constitute inequitable conduct.

Even though Mr. Raffle disclosed and submitted the Roos '198 patent to the Patent Office, Smith & Nephew contends that he deceived the Patent Office by arguing that the Roos '198 patent does not disclose the use of "electrically conductive fluid." According to Smith & Nephew, this argument is inconsistent with claim 1 of the Roos '198 patent, which states that an unspecified liquid "provide[s] electrical conductance." (D.I. 442 at 3, 11-15.) This argument fails for a number of reasons.

First, Smith & Nephew's argument relies upon a string of inferences that begins with its inference that because the Examiner stated "a conductive fluid must complete the current path," he necessarily found in his initial rejection that conductive fluid was inherently – not explicitly – present in the Roos '198 patent. (D.I. 442 at 11.) From this, Smith & Nephew infers that the Examiner did not actually review claim 1 of the Roos '198 patent because, otherwise, he "certainly would have referred to claim 1 of the Roos '198 patent as supporting his rejection."

(D.I. 442 at 12.)³ Smith & Nephew then infers that Mr. Raffle was aware of these "facts," and that he took advantage of them. (D.I. 442 at 14.) This argument cannot succeed as a matter of law because a string of inferences is not clear and convincing evidence. See FMC Corp. v. Manitowoc Co. Inc., 835 F.2d 1411, 1417 (Fed. Cir. 1987) ("An inference can and often must be drawn from established facts and direct proof of wrongful intent is not required, but drawing an inference on an inference is not the role of the fact finder.") (emphasis added); Fuji Photo Film Co. Ltd. v. Jazz Photo Corp., Inc., 173 F. Supp. 2d 268, 276 (D.N.J. 2001) ("a string of inferences of misconduct" is not clear and convincing evidence of inequitable conduct). The Federal Circuit has described as "absolutely accurate" a trial court's statement that "a determination of 'inequitable conduct' may not be based on inferences." FMC Corp., 835 F.2d at 1417 n.11.

Second, Mr. Raffle did not misrepresent anything. The Roos '198 patent does not disclose the use of an electrically conductive fluid. Smith & Nephew's argument to the contrary has been rejected by Examiner Cohen during the '592 prosecution, by Examiner Mendez and a board of primary examiners during the '536 reexamination, and by the jury at trial. Indeed, claim 1 of the Roos '198 patent was specifically cited three times during the '536 reexamination (in the request for reexamination and twice in Smith & Nephew's invalidity contentions) (PX 7 at 25, 117, and 317) and extensively argued at trial. Nevertheless, neither the examiners nor the jury agreed that claim 1 disclosed an electrically conductive fluid.

This inference is clearly wrong. The Federal Circuit has held that "government officials are presumed to have properly discharged their official duties. If the references were in front of the examiner, it must be assumed that he or she reviewed them." In re Portola Packaging, 110 F.3d 786, 790 (Fed. Cir. 1997) (internal quotation and citation omitted). Smith & Nephew's reliance on Bristol-Myers Squibb Co. v. Rhone-Poulenc Rorer, Inc., 326 F.3d 1226 (Fed. Cir. 2003), is misplaced. (D.1. 442 at 12, n.5.) In that case, the facts suggested that the entire reference was never before the Patent Office: "the file history [did] not contain a copy of the JACS article and the Examiner did not initial and date the listing of the article to nt the search report." Id. at 1236.

As the evidence at trial—particularly the cross-examination of Smith & Nephew's expert,

Dr. Taylor — established, the Roos '198 patent does not disclose the use of electrically conductive fluid:

- Both Dr. Taylor and Dr. Choti admitted that all fluids, whether electrically
 conductive or non conductive, will conduct some electrical current. (Tr. at
 1338-40, 1342-43, and 735-36.) Thus, the language in claim 1 that the
 liquid "provide[s] electrical conductance" is perfectly consistent with the
 liquid being electrically non-conductive.
- The Roos '198 patent describes the admittedly non-conductive liquid used with the monopolar embodiment in the same way as it describes the altegedly conductive liquid used with the bipolar embodiments. This suggests that the liquid used with the bipolar embodiments also is non-conductive. (Tr. at 1343-44.)
- Figure 5 and col. 6:51-53 of the Roos '198 patent demonstrate that the
 invention requires contact between the return electrode and the tissue to
 ensure good electrical contact. This contact would not be required if the
 fluid were electrically conducting fluid. (Tr. at 1344-45.)
- The Roos '667 patent demonstrates that the washing liquid in the Roos '198 patent was not electrically conductive but instead required body secretions to make the fluid electrically conductive. (Tr. at 1361-66.)

Indeed, Smith & Nephew did not even assert the Roos '198 patent against the '592 patent at trial.⁶ (Tr. at 1728.)

Third, the fact that Mr. Raffle disclosed and distinguished the Roos '198 patent during prosecution of the '592 patent does not constitute inequitable conduct. ArthroCare disclosed the Roos '198 patent to Examiner Cohen and he was free to reach his own conclusions about what it disclosed. See Life Techs., Inc. v. Clontech Labs., Inc., 224 F.3d 1320, 1326 (Fed. Cir. 2000) (finding no inequitable conduct as "the inventors merely advocated a particular interpretation...

Smith & Nephew points out that ArthroCare did not call an expert to rebut Dr. Taylor's testimony that the Roos '198 patent disclosed the use of electrically conductive fluid. (D.I. 442 at 13.) There was no reason for ArthroCare to call its expert, after Dr. Taylor's admissions on cross-examination.

which the Examiner was free to accept or reject" because the reference in question was disclosed to the Examiner): Akzo N.V. v. U.S. Int'l Trade Comm'n, 808 F.2d 1471, 1482 (Fed. Cir. 1986). cert, denied, 482 U.S. 909 (1987) ("The mere fact that [the applicant] attempted to distinguish (its) process from the prior art does not constitute a material omission or misrepresentation. The examiner was free to reach his own conclusion regarding the [] process based on the art in front of him."); LifeScan, Inc. v. Home Diagnostics, Inc., 103 F. Supp. 2d 379, 386 (D. Del. 2000). aff'd. 2001 WL 345349 (Fed. Cir. Apr. 6, 2001) ("TThe mere fact that a patent applicant attempts to distinguish its patent from prior art does not constitute a material omission or misrepresentation where the patent examiner has the prior art before him or her, and therefore, is free to make his or her own conclusions regarding the claimed invention.").7 Moreover, the Examiner's allowance over Roos and the jury's verdict that the patent was not invalid demonstrate that Mr. Raffle's statements were true. Where an applicant's statement distinguishing a reference is true and not misleading, it cannot provide the basis for a finding of inequitable conduct. Wesley Jessen Corp. v. Bausch & Lomb, Inc., 209 F. Supp. 2d 348, 402 (D. Del. 2002), aff'd, 56 Fed. Appx. 503 (Fed. Cir. 2003).8

Fourth, Mr. Raffle had no obligation to point out claim 1 of the Roos patent, because he disclosed the entire Roos patent, including claim 1, to the examiner. Smith & Nephew points to no authority in support of its assertion. In fact, Federal Circuit law and a case Smith & Nephew

Examiner Cohen also was the primary examiner of the Roos '198 patent. (JTX 3 at 1, DTX 11 at 1.) Thus, Examiner Cohen was uniquely qualified to evaluate the Roos '198 patent and any relevance it might have to the '592 patent.

The fact that Smith & Nephew's attorneys interpret the Roos '198 patent differently than Mr. Raffle is no basis on which to charge inequitable conduct. See SRI Int'l, Inc. v. Advanced Tech. Lads, Inc. 127 F.3d 1462, 1466 (Fed. Cir. 1997) ("IDefendan's attorney) gives no evidence whatsoever to support this altegation [of inequitable conduct], other than the mere fact that his interpretation of the [] art differs from that propounded by [patentee] and accepted by the examiner at the reexamination proceeding. Such a difference of opinion is a slender reed on which to hang a very serious allegation.").

cites refute the assertion. See Scripps Clinic & Research Found. v. Genentech, Inc., 927 F.2d.

1565, 1582 (Fed. Cir. 1991) (rejecting argument that applicant's failure to point out the abstract of a prior art reference that was before the examiner was inequitable conduct); Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp., 68 F. Supp. 2d 508, 546 (D.N.J. 1999), appeal dismissed by 232 F.3d 905 (Fed. Cir. 2000) ("I conclude that [defendant] has failed to set forth even a mildly tenable defense of inequitable conduct based upon [patentee's] submission of the [reference] to the USPO without highlighting the [particular portions]."). There is no requirement to explain the relevance of the prior art disclosed to the Patent Office. See Fiskars, 221 F.3d at 1327 ("[T]he earlier PTO requirement that the applicant explain the relevance of the references listed was removed in 1992."). As a result, "[a]n applicant cannot be guilty of inequitable conduct if the reference was cited to the examiner." Fiskars, 221 F.3d at 1327; Scripps, 927 F.2d at 1582 ("When a reference was before the examiner." it can not be deemed to have been withheld from the examiner.").

Fifth, there is no evidence — much less clear and convincing evidence — of any culpable intent. Smith & Nephew has presented no evidence suggesting that Mr. Raffle believed the Roos 198 patent disclosed electrically conducting fluid or that he intended to deceive the Patent Office. The absence of any evidence whatsoever from which one could infer intent requires a finding of no inequitable conduct. See Amgen, 314 F.3d at 1358 ("[T]here must be some threshold showing of intent . . .; we will not find inequitable conduct on an evidentiary record that is completely devoid of evidence of the patentee's intent to deceive the PTO."); Abbott Labs. v. TorPharm, Inc., 300 F.3d 1367, 1380 (Fed. Cir. 2002) (finding no inequitable conduct where the defendant failed to "explain how a fact finder could find the requisite intent to deceive the Patent Office, simply asserting in its reply brief that the intent to deceive may be inferred from

the omission alone"). To the contrary, the evidence shows that Mr. Raffle acted in good faith by submitting the Roos '198 patent to the Patent Office where it was duly considered and formed the basis for an initial rejection of the claims of the pending application. (DX 301, A-29-A-39; Tr. 1531.)

 Mr. Raffle's disclosure of Judge Orrick's opinion to the Patent Office cannot constitute inequitable conduct.

Smith & Nephew also argues that Mr. Raffle committed inequilable conduct during prosecution of the '592 patent by not submitting a copy of Judge Orrick's preliminary injunction opinion to the Patent Office. (D.I. 442 at 3, 15.) This argument also is unsupported.

First, Judge Orrick's opinion was not withheld from the Patent Office. Mr. Raffle disclosed the existence of the opinion to the Patent Office by including it in a list of materials from the Ethicon litigation, thus putting the Patent Office on notice of the reference. 10 (DX 300, A-3-A-12). See Akron Polymer, 148 F.3d at 1383-84 (reversing a finding of inequitable conduct because the applicant did "disclose the existence of" the reference in question and "thus put the PTO on notice" of the disputed reference); Dayco, 329 F.3d at 1366 (applying an "inform (the Examiner) of the existence of the [reference]" standard). Mr. Raffle identified Judge Orrick's opinion in a list of documents that he described as reflecting the parties' primary validity and

Smith & Nephew claims that Mr. Raffle admitted that he "knew about the disclosure of electrically conducting fluid, i.e., "liquid to provide electrical conductance," in claim 1 of the Roos '198 patent, but did not tell the Examiner about what he knew." (D.I. 472 at 14.) Mr. Raffle did not admit he knew that claim 1 disclosed "electrically conducting fluid," but only that he knew that claim 1 said "liquid to provide electrical conductance." (Tr. at 1517.)

To the extent that Smith & Nephew's statement that "Mr. Raffle simply listed the opinion as the 40th in a list of 80 items" is suggesting that Mr. Raffle attempted to hide the opinion from the examiner, the suggestion is baseless. The reason the interlocutory opinion is listed 40th is because Mr. Raffle listed the materials from the Ethicon littles on in chronological order.

enforceability arguments, and offered to provide the Examiner with a copy of any or all of those documents. (DTX 300, A-3-A-12.)¹¹

Second, Smith & Nephew has not shown that Judge Orrick's opinion is material. Nor could it, because the Patent Office has made clear that Judge Orrick's preliminary, non-binding decision about the Roos '198 patent is not relevant to patentability. During the '536 reexamination, Mr. Raffle provided Judge Orrick's opinion to the Patent Office and disclosed Smith & Nephew's allegation that ArthroCare had committed inequitable conduct by not submitting that opinion to the Patent Office during prosecution of the '592 patent. (PX 7 at 83, 229.) Notwithstanding Judge Orrick's opinion and Smith & Nephew's allegations, a board of patent examiners found that the Roos '198 patent did not disclose the use of electrically conductive fluid. (PX 7 at 214-20).

Moreover, Judge Orrick's opinion — which is not even in evidence — was a preliminary opinion not based on a complete record and simply found that the Roos '198 patent raised a substantial question of validity sufficient to deny a preliminary injunction. This Court previously has observed that the opinion is of little, if any, relevance:

But [Judge Ortick's opinion is] not relevant unless I in fact agree with the Judge, is it? If I think his determination of invalidity is off the wall, then it's not [relevant] — I just am not confident that a preliminary determination by a judge and a party's reaction to it has any relevance to good faith or bad faith in bringing a patent case, because it is not binding. I just don't understand how it has any relevance.

(D.I. 49 at 38). When Smith & Nephew sought to use that opinion to seek discovery of ArthroCare's good faith basis for bringing this action (D.I. 47), the Court denied that request,

By indicating that the listed materials reflected the parties' primary validity and enforceability arguments, Mr. Raffle provided the Examiner with enough information to allow him to evaluate the need to ask for the listed materials pursuant to M.P.E.P. 2001.06(c).

noting that "the relevance, if any, of a judge's preliminary review of validity issues in the context of a preliminary injunction motion" was "far outweighed" by other considerations. (D.I. 53). Smith & Nephew moved for reargument on the ground that Judge Orrick's opinion was "highly relevant" to ArthroCare's good faith basis for bringing this lawsuit. (D.I. 62). This Court denied that motion as well, stating:

Given that the issue of validity will be tried in this court, and given the preliminary findings in unrelated hitigation have no preclusive effect in the itigation at bar, the court finds defendants' assertion [that Judge Orrick's Opinion was relevant] to be, at best, hopelessly confusing to a jury and, at most, futile as unsupported by either the facts or the law.

(D.I. 141.) Indeed, the Court precluded Judge Orick's opinion from being used before the jury in this case. (D.I. 367 at ¶ 5.)¹²

Third, the record again lacks any evidence of intent to deceive the Patent Office, but instead demonstrates Mr. Raffle's good faith. Mr. Raffle identified Judge Orrick's opinion for the examiner, described it as a document that reflected the parties' primary arguments, and offered to provide a copy to the examiner. Dee Dayco, 329 F.3d at 1366 (stating that "the

The cases upon which Smith & Nephew relies on page 17 of its Opening Brief are inapposite. In Newell Window Furnishings, Inc. v. Springs Window Fashions Div., Inc. 53 U.S.P.Q.2d (BNA) 1302 (N.D. Ill. Oct. 7, 1999), aff it in part, revd in part, 2001 w. 744460 (Fed. Cir. Jul. 2, 2001), and Golden Valley Microwave Foods, Inc. v. Weaver Popcorn Co., Inc. 337 F. Supp. 1444 (N.D. Ind. 1992), the patentees did not disclose even the existence of the litigation. In Marlow Indus., Inc. v. Igloo Prods. Corp., 2007 W1. 485698 (N.D. Tex. Mar. 28, 2002), aff d. 2003 WL 21212626 (Fed. Cir. 2003), the patentee disclosed no information regarding the disputed claim construction opinion. In contrast, ArthroCare did disclose the existence of the Ethicon litigation and of Judge Orrick's opinion.

Smith & Nephew's assertion that Mr. Raffle did not disclose Judge Orrick's opinion to the Patent Office in technical conformance with the M.P.E.P. is irrelevant. Soc Hoffman-La Rocke, 323 F.3d at 1377 (noting that failure to follow the M.P.E.P. on "negligence alone, even gross negligence, does not establish inequitable conduct"). LNF. Eng'g Plastics, Inc. w. Miller Waste Mills, Inc., 2000 WI. 33341185 (D. Del. Aug. 8, 2000) (finding no inequitable conduct despite applicant's failure to disclose a reference that formed the basis of foreign rejection as required by M.P.E.P. § 2001.06(a)), 4ff'at, 275 F.3d 1347 (Fect. Cir. 2001); Duty of Disclosure, 57 Fed. Reg. 2021, 2024 (Jan. 7)

requisite intent could not be inferred" because the applicant disclosed the reference); Akron Polymer, 148 F.3d at 1384 (disclosure of a reference "points away from an intent to deceive").

Smith & Nephew also contends that Mr. Raffle committed inequitable conduct by not telling the Examiner that Judge Ornick had previously rejected ArthroCare's arguments concerning the Roos '667 patent. (D.I. 442 at 16.) As discussed above, however, the opinion was adequately disclosed to the Patent Office, the Court has already observed that Judge Ornick's opinion is of little, if any, relevance, Judge Ornick's opinion was deemed not relevant by a board of examiners during the '536 reexamination, and there is only evidence of good faith given that Mr. Raffle disclosed both the Roos '198 and '667 patents to the Patent Office. ¹⁴

 Mr. Raffle's submission of the Roos article cannot constitute inequitable conduct.

Even though Mr. Raffle disclosed the Roos article to the Patent Office, Smith & Nephew argues that Mr. Raffle committed inequitable conduct during prosecution of the '592 patent by failing to disclose that the Roos article described the use of one of the devices described in the Roos '198 patent in 32 successful surgeries or that the Roos article allegedly described the irrigation liquid as facilitating the passage of electrical current. (D.I. 442 at 16.) Again, the record does not support Smith & Nephew's allegations.

^{1992) (}the Patent Office "rules do not define fraud or inequitable conduct which have elements both of materiality and intent").

Smith & Nephew also argues that Mr. Raffle knew that the Roos article was more relevant to the Roos '198 patent than the Roos '667 patent. (D.I. 442 at 16.) There is no evidence that Mr. Raffle thought the Roos article was more relevant than the Roos '667 patent, and the evidence at trial shows that the Roos '667 patent was more relevant than the Roos article to the issue of whether the Roos '198 patent disclosed the use of electrically conductive fluid. (Tr. at 1359-69.) In any event, Mr. Raffle submitted all of these references to the Patent Office and the Examiner was free to draw his own conclusions, (DTX 301, A-29-A-44.)

First, Mr. Raftle disclosed the Roos atticle to the Patent Office, and he was under no obligation to point out any particular parts of that reference. See Scripps, 927 F.2d at 1582 (rejecting the argument that the applicant's failure to point out the abstract of prior art before the examiner was inequitable conduct); Fishars, 221 F.3d at 1327 ("[T]he earlier PTO requirement that the applicant explain the references of the references listed was removed in 1992.").

Second, the fact that the device was successful in surgery does not mean that it used electrically conducting fluid. In fact, many prior art devices worked by using electrically non-conducting fluid. Dr. Taylor admitted at trial that glycine, an electrically non-conducting fluid, had been the conventional fluid used with devices such as that described in the Roos article. (Tr. at 1339-40.)¹⁵

Third, there is no evidence of any intent on the part of Mr. Raffle to deceive the Patent Office – only evidence of good faith. Mr. Raffle disclosed the Roos article to the Patent Office. Examiner Cohen indicated that he considered the article, ¹⁶ and he was free to draw whatever conclusions he wanted to from it. Smith & Nephew's attempt to infer culpable intent, without probative evidence thereof, must fail. See Multiform Desiccants, Inc. v. Medzam Ltd., 133 F.3d 1473, 1482 (Fed. Cir. 1998) ("[I]Inference without any probative evidence is insufficient to show culpable intent.").

The alleged materiality of the Roos article is further undercut by the fact that Smith & Nephew did not even argue the Roos article rendered the '592 patent invalid at trial. (Tr. 1728.)

Examiner Cohen put his initials next to the Roos article listed on Applicants' Form PTO-1449, demonstrating that he considered the reference. (DTX 301, A-29).

C. There Is No Evidence That Mr. Raffle Committed Inequitable Conduct During The Reexamination Of The '536 Patent.

A third party filed a Request for Reexamination of the '536 patent on December 23, 1999. (PX 7 at 5-19). That Request sought reexamination of the '536 patent based solely on the Roos '198 patent, and contained a detailed claim chart comparing claims of the '536 patent to the disclosure of the Roos '198 patent – including a quotation of that portion of claim 1 of the Roos patent upon which Smith & Nephew so heavily relies. (PX 7 at 25). The Request was assigned to Examiner Mendez, who granted it ou February 2, 2000. (PX 7 at 64-65).

On October 12, 2001, Mr. Raffle submitted an Information Disclosure Statement, which disclosed the Ethicon litigation, the references (including the Roos article) principally relied upon by the defendants in Ethicon, and a list of materials from Ethicon that reflected the parties' primary invalidity and enforceability arguments. (PX 7 at 76-95). That Statement also disclosed this action, Smith & Nephew's allegation that during the '592 prosecution, ArthroCare should have pointed out Judge Orrick's opinion, and a list of the documents that included Smith & Nephew's primary invalidity and unenforceability arguments. (PX-7 at 83-84.) On June 6, 2002, Mr. Sanjay Bagade (another ArthroCare patent attorney) submitted a second Information Disclosure Statement disclosing Smith & Nephew's June 3, 2002 invalidity contentions (in the form of Smith & Nephew's responses to ArthroCare's contention interrogatories) and additional references. (PX 7 at 97-146.) Smith & Nephew's contentions included 36 pages of claim charts (PX 7 at 111-146) and specifically pointed out that portion of claim 1 of the Roos '198 patent upon which Smith & Nephew relies ("col. 7, lines 59-62") (PX 7 at 117).

On November 15, 2002, Examiner Meudez issued an Office Action which concluded that the Roos '198 patent did not reader the '536 patent unpatentable. (PX 7 at 211-26.) Specifically, Examiner Mendez stated that "[t]he arguments presented by the Request concerning the Roos '198 were addressed in a final decision by the examiner of record and reviewed by a board of primary examiners that convened to analyze the decision and make a final determination." (PX 7 at 213.) Examiner Mendez and the board concluded that "[a]fler careful[] consideration and review of Roos '198, it is hereby found that Roos '198 does not anticipate or render obvious any of the independent claims of record" because the Roos patent never describes the use of "electrically conductive fluid." (PX 7 at 214-20.) At the same time, however, the Examiner rejected claims of the '536 patent based on other references identified in Smith & Nephew's invalidity contentions. (PX 7 at 220-26.)

On December 19, 2002, Mr. Bagade submitted a Response to the First Office Action, in which he argued that none of the references rendered claims of the '536 unpatentable. (PX 7 at 231-54.) At the same time, he submitted a third Information Disclosure Statement, attaching Smith & Nephew's September 10, 2002 invalidity contentions, Smith & Nephew's October 9, 2002 invalidity contentions, the file history of the Roos '198 patent, and additional references. (PX 7 at 290-562.) Those invalidity contentions contained another 37 pages of claim charts concerning the '536 patent. (PX 7 at 296-306, 308-09, 313-34, 336-37.) Mr. Bagade also submitted a Written Statement Per 37 C.F.R. § 1.560(b). (PX 7 at 228-230.) That Statement described various communications between the Patent Office and Messrs. Raffle and Bagade, and indicated that Mr. Raffle had provided a copy of Judge Orrick's opinion to the Examiner. (Id.) Examiner Mendez never submitted any document correcting or supplementing the contents of the Statement.

See M.P.E.P. § 713.04: Substance of Interview Must Be Made of Record ("It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.").

On March 14, 2003, Examiner Mendez, Supervisory Patent Examiner Brian Casler, and
Supervisory Patent Examiner Angela Sykes issued a Notice of Intent to Issue Ex Parte
Reexamination Certificate. (PX 7 at 563-65.) That Notice states: "The examiner of record
concurs with the arguments presented by the patent owner on paper number 15. Accordingly, it
is concluded that claims 1-64 are allowable over the prior art of record." (PX 7 at 565.)

 Failure to disclose Smith & Nephew's immaterial and cumulative arguments regarding validity cannot constitute inequitable conduct.

Even though Messrs. Raffle and Bagade disclosed to the Patent Office three sets of Smith & Nephew's invalidity contentions and all of the references upon which Smith & Nephew relied, Smith & Nephew argues that ArthroCare committed inequitable conduct by failing to disclose Smith & Nephew's invalidity summary judgment briefs and Dr. Taylor's expert report on invalidity, none of which is of record. (D.I. 442 at 3, 21.) This allegation is totally lacking in substance.

First, Smith & Nephew's briefs and Dr. Taylor's report were not material because they were cumulative to the references therein and to Smith & Nephew's invalidity contentions that were already before the Patent Office. See 37 C.F.R. § 1.56 (stating that "information is material to patentability when it is not cumulative to information already of record or being made of record in the application . . ."). Smith & Nephew has not identified anything that its briefs or Dr. Taylor's report would have added to what was already disclosed in its invalidity contentions and references. See Dayco, 329 F.3d at 1367 ("Whether [a particular reference] meets the threshold level of materiality would require a detailed factual analysis of the relevance of the teachings of that reference both with respect to the claims of the patents in-suit and with respect to the other prior art references that were before the examiner."); Halliburton Co. v. Schiumberger Tech.

Corp., 925 F.2d 1435, 1439-40 (Fed. Cir. 1991) (holding that the failure to disclose cumulative

references that were not more material than those that were cited to the examiner was not inequitable conduct).

Smith & Nephew's briefs and expert report were simply its arguments — not prior art, facts, or material information upon which the Patent Office properly bases its examination of patent applications. See Aptix Corp. v. Quickturn Design Sys. Inc., 269 F.3d 1369, 1376 (Fed. Cir. 2001) (stating that the process creating the patent right "demands that all facts relevant to [patentability] . . . be submitted formally or informally to the Patent Office, which can then pass upon the sufficiency of the evidence") (emphasis added); M.P.E.P. §§ 706 and 2001.

Morcover, the arguments in the briefs and report have been soundly rejected – the Court denied Smith & Nephew's summary judgment motions (D.I. 352, 354), and the jury rejected Smith & Nephews invalidity arguments (D.I. 405 at 7).

Second, the evidence demonstrates only good faith, not intent to deceive. During the reexamination, Messrs. Raffle and Bagade disclosed to the Patent Office the existence of this litigation, Smith & Nephew's inequitable conduct allegation that during the '592 prosecution ArthroCare should have pointed out Judge Ornick's opinion, a list of documents containing the parties' primary validity and enforceability arguments, three sets of Smith & Nephew's invalidity contentions, the references upon which Smith & Nephew relied, and the file history of the Roos '198 patent. (PX 7 at 83-84, 97-146, 290-562.) See Amgen, 314 F.3d at 1357-58 (affirming finding of no inequitable conduct based on failure to disclose even the existence of pending litigation because there was no evidence of intent to deceive).

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Smith & Nephew's citation of Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp., 68 F. Supp. 2d 508 (D.N.J. 1999), in support of its assertion that ArthroCare's "limited disclosure" of materials from this litigation demonstrates an intent to deceive is unavailing. (D.I. 442 at 28.) In that case, the patentee failed "to disclose to the USPO anything about the "718 Patent Idigation except its mere existence and the fact that some of the prior at came from that litigation." 68 F. Supp. 2d at 551.

Aeroquip Corp., 733 F.2d 881, 888 89 (Fed. Cir. 1984) (inventor testimony may not be used to elaborate on the actual disclosure of a prior art reference); Transclean Corp. v. Bridewood Servs., Inc., 290 F.3d 1364, 1372 (Fed. Cir. 2002) (same). In addition, the Roes Declaration is conclusory, unreliable hearsay. There is no indication, for example, of what definition of "electrically conducting fluid" Mr. Roes was using when he described the washing liquid as "electrically conducting," or what the washing liquid was. To the extent he used the construction of that phrase proposed by Smith & Nephew, "any fluid that allows the passage of electrical current, such as blood and saline" (D.1. 270 at 11-12), it would not meet the Court's definition of "electrically conducting fluid" on which the jury was instructed. Given its unreliability and lack of relevance, the Court excluded the Roos Declaration from use at trial. (D.1. 367 § 9.)²¹

Second, as for intent to deceive, there is no evidence that Messrs. Raffle or Bagade hail possession of the Roos Declaration during the '536 reexamination. See FMC Corp., 835 F.2d at 1415. Smith & Nephew's arguments to the contrary are not evidence.

 Smith & Nephew's accusations of improper conduct by Examiner Mendez, a board of examiners and Mr. Raffle are baseless.

Smith & Nephew's final inequitable conduct argument with respect to the '536 reexamination is that "Mr. Raffle may have convinced the Examiner to simply parrot back arguments that Mr. Raffle had previously made with respect to the Roos '198 patent during prosecution of the '592 patent without performing any independent analysis." (D.I. 442 at 3-4, 21-22.) This argument is absurd.

Smith & Nephew's reliance on M.P.E.P. § 2258(I)(E) concerning affidavits and declarations is misplaced. (D.I. 442 at 24.) First, such affidavits are permitted, not required, to be submitted. Second, the M.P.E.P. makes clear that it is the reference, not the affidavit, that must form the basis for any rejection. See M.P.E.P. § 2258(I)(E) ("The rejection... cannot be based upon the affidavits or declarations as such, but must be based on the prior art or printed multications."

First, patent examiners are presumed to have performed their duties. See Amgen, 314

F.3d at 1327 ("We must presume the examiner did his job"); Northern Telecom, Inc. v.

Datapoint Corp., 908 F.2d 931, 939 (Fed. Cir.), cert. denied, 498 U.S. 920 (1990) ("It is assumed that public officials do their assigned jobs."). With regard to the '536 reexamination in particular, Examiner Mendez must have reviewed the Roos '198 patent – the art that formed the sole basis of the request for reexamination – to determine whether it raised a substantial new question of patentability. See 37 C.F.R. § 1.515(a) ("[A]n examiner will consider the request and determine whether or not a substantial new question of patentability . . . is raised by . . . the prior art cited therein"); Molins, 48 F.3d at 1184 (assuming, absent proof to the contrary, that examiner considered reference submitted in reexamination that examiner had initialed).

Second, there is absolutely no evidence to support Smith & Nephew's innuendo that Mr.

Raffle somehow convinced Examiner Mendez to disregard his obligation to do an independent
analysis of the Roos nateut. Instead, all of the evidence is to the contrary:

- Because the Roos '198 patent was the sole basis of the reexamination request, the Examiner must have considered it in determining initially that it raised a substantial new question of patentability. (PX 7 at 5-26, 64-65.)
- On January 20, 2002, Examiner Mendez placed his initials next to the Roos '198 patent listed on the reexamination requestor's Form PTO-1449, indicating that he had considered the patent. (PX 7 at 66.)
- In the November 15, 2002 Office Action, Examiner Mendez confirmed that he had indeed done "a complete review of the merits of the Request." (PX 7 at 213.) He even stated that he had engaged in "careful[] consideration and review of Roos '198." (PX 7 at 214.)
- In his analysis of the Roos '198 patent, the Examiner added a citation to the Roos '667 patent, which demonstrates that he reviewed the documents underlying Mr. Raffle's arguments distinguishing the Roos '198 patent. (Compare DTX 301, A-27 with PX 7 at 219).

In any event, an examiner's agreement with, and acceptance of, a patentee's position does not constitute inequitable conduct. Third, the November 15, 2002 Office Action states that "[t] the arguments presented in the Request concerning Roos '198 were addressed in a final decision by the examiner of record and reviewed by a board of primary examiners that convened to analyze the decision and make a final determination." (PX 7 at 213 (emphasis supplied).) Thus, Smith & Nephew's argument is based on the unsupported assumption that Mr. Raffle somehow convinced not only Examiner Mendez, but the entire board of examiners, to disregard their responsibilities.

Fourth, there is no evidence that Mr. Rafile intended to deceive Examiner Mendez. At trial, Smith & Nephew failed to examine Mr. Rafile regarding its "parroting back" theory. Thus, it bases its allegations entirely upon conjecture. See In re Hayes Microcomputer Prods., 982 F.2d at 1546 ("Conjecture alone is not sufficient to show an intent to deceive to support the defense of inequitable conduct.").²²

In a final attempt to find support for its assertion that Mr. Raffle convinced Examiner Mendez to ignore his duties and "parrot back" the '592 file history, Smith & Nephew renews its request for leave to take Examiner Mendez's deposition. Such a deposition would be a waste of the parties' and the Patent Office's time and resources. Smith & Nephew's ostensible reason for deposing Examiner Mendez is to determine what was said in the "off-the-record" conversations

Smith & Nephew claims that Mr. Raffle had numerous "off-the-record" conversations with Examiner Mendez pirot to the first office action on the merits in violation of 37 C.F.R. § 1.550(a) and M.P.E.P. 2281. (D.I. 442 at 26.) Smith & Nephew also claims those discussions were not summarized as required by 37 C.F.R. § 1.560(b) and M.P.E.P. 2281. (d.I. There is no evidence in the record of alleged off-the-record conversations. In addition, Mr. Bagade submitted a Written Statement Per 37 C.F.R. § 1.550(b) that summarized various communications between the Patent Office and Messers. Raffle and Bagade (PX 7 at 228-230), and there is no evidence that this summary is incomplete or insecurate in any way. In any event, technical violations of Patent Office rules do not constitute inequitable conduct. See Nintendo of Am. Inc. v Magnavox Co., 707 F. Supp. 717, 729-30 (S.D.N.Y. 1989) (rejecting allegation of inequitable conduct based on patentee's interview with examiner before first office action in reissue and failure to submit a summary of that interview because "these violations in and of themsetves do not amount to inequitable conduct sufficient to render the patent invalid".

between the Examiner and Mr. Raffle. (D.I. 442 at 26.) But there is no evidence of any "off-therecord conversations." On December 16, 2002, Mr. Bagade submitted a Written Statement Per 37 C.F.R. § 1.560(b) that summarized various communications between the Patent Office and Messrs. Raffle and Bagade (PX 7 at 228-30), and Examiner Mendez never corrected or supplemented the contents of that Statement. See M.P.E.P. § 713.04.

Moreover, given the topics that Smith & Nephew wants to cover during the proposed deposition, the questioning will cover areas that are forbidden under M.P.E.P. § 1701.01 and the relevant case law. Any inquiry into why Examiner Mendez used the words that he did in allowing the claims over the Roos '198 patent, or what facts and arguments formed the basis for his decision, would be improper. Those areas necessarily entail investigation into Mr. Mendez's understanding of the prior art, reliance on particular facts or arguments, mental processes. analyses, or conclusions, each of which is specifically forbidden. See M.P.E.P. § 1701.01. Any attempt by Smith & Nephew to disguise such forbidden inquiry into these topics as mere investigation of factual matters should be rejected. See Western Elec. Co., Inc. v. Piezo Tech., Inc., 860 F.2d 428, 432 (Fed. Cir. 1988) (reversing, as an abuse of discretion, a district court's order requiring an examiner to answer questions, including those directed at supporting inequitable conduct; "While the questions posed to [the examiner] may in form be deemed to satisfy the first portion of the above test, i.e., they are limited to factual matters, we are satisfied they fail the second portion, which prohibits inquiry into hypothetical areas or matters relevant to the examiner's thought process in arriving at a decision,"). In any event, the trial record is closed and the Court has rejected Smith & Nephew's request to re-open it.

D. There Is No Evidence That The '882 Patent Was Procured Through Inequitable Conduct.

During prosecution of the "882 patent, Mr. Raffle filed a Supplemental Amendment on March 25, 1997, that sought to make two changes to the claims of the application – the first to change "active electrode" to "electrode terminal" and the second to change "electrically conducting liquid" to "electrically conducting fluid." (DTX 306, C-2-C-12). Unfortunately, Mt. Raffle made some mistakes in attempting to do so. In application claim 23 (which ultimately issued as claim 1), Mr. Raffle changed "active electrode" to "electrode terminal" in three places, but mistakenly failed to change it in a fourth place. (Id. at C-3). Also, white Mr. Raffle changed "liquid" to "fluid" in one place, he mistakenly changed "liquid" to "terminal" in another. (Id). Mr. Raffle made a similar mistake in application claim 52, changing "active electrode" to "electrode terminal" in two places, but mistakenly failing to change it in a third place. (Id. at C-6-C-7).

Mr. Raffle realized that he had made the mistakes in issued claim 1 when he reviewed the '882 patent on the day it issued. (Tr. at 1526-27.) The very next day, Mr. Raffle sought to correct his mistakes in issued claim 1 by filing a Request for Certificate of Correction. (Tr. at 1527; DTX 306, C-13-C-15). In that Request, Mr. Raffle explained that when he filed the March 25, 1997 Supplemental Amendment, he mistakenly forgot to replace the term "active electrode" with "electrode terminal" in one place in application claim 23, and pointed out that that failure created a possible antecedent basis problem. (DTX 306, C-13). Mr. Raffle further explained that, in application claim 23, he had also mistakenly replaced "liquid" with "terminal" instead of "fluid" as in the rest of claim 23 and in the other claims. (Id. at C-14).

On review of the Request, the Supervisor of Art Unit 3306 (the unit that had exammed the '882 patent) determined that the changes requested would not constitute new matter, would not require reexamination, and would not materially affect the scope or meaning of the claims allowed by the examiner. (DTX 306, C-16). As a result, the Patent Office issued the Certificate of Correction. (DTX 306, C-17).

At trial, Smith & Nephew argued that the Certificate of Correction was invalid because it did not correct a clerical or typographical error. (Tr. at 1651.) At the close of the evidence, the jury was instructed that:

When the patent applicant is the one who – like ArthroCare – made the error, it can use a certificate of correction only to correct errors of a clerical or typographical nature. An error is clerical or typographical if one of skill in the art can tell just from looking at the patent and the prosecution history that there was an error and also how that error should be corrected. A certificate of correction for any other errors is not valid and can be challenged in court.

(Tr. at 1734.) On May 12, 2003, the jury rendered its verdict, finding that the certificate of correction was not invalid. (D.I. 405 at 3.)

Smith & Nephew now argues for the first time that, in obtaining the Certificate of Correction, Mr. Raffle committed inequitable conduct by making two affirmative misrepresentations and by failing to explain how the so-called "correction" would broaden the claim. (D.I. 442 at 4, 28-35.) All of those allegations are premised on Smith & Nephew's contention that the "broadening" of claim I was improper because the Certificate of Correction did not correct clerical or typographical errors. But the jury rejected that contention. In reaching its verdict, the jury determined that the Certificate of Correction corrected clerical or typographical errors. That finding is binding on the Court. See Beacon Theatres, Inc. v. Westover, 359 U.S. 500, 506-11 (1959) (holding that, pursuant to the Seventh Amendment, a court is bound by a jury's prior determination on overlapping issues). For this reason alone, Smith & Nephew's inequitable conduct allegations concerning the '882 patent should be rejected.

Smith & Nephew's first allegation with respect to the '882 patent is that Mr. Raffle committed inequitable conduct by falsely asserting, in support of his argument that the changes he was seeking in the Request for Certificate of Correction involved only correction of typographical errors, that "Talpplicant amended all of the claims to replace the term 'active electrode' with 'electrode terminal." (D.I. 442 at 29.) Mr. Raffle testified at trial that, in the March 25, 1997 Supplemental Amendment, he "wanted to replace active electrode with electrode terminal in all the claims," (Tr. at 1524.) Indeed, Mr. Raffle replaced "active electrode" with "electrode terminal" 17 of the 19 times that term appeared in the pending claims, including three times in application claim 23 and twice in application claim 52. (DTX 306, C-2-C-12). That he inadvertently failed to replace "active electrode" once in each of application claims 23 and 52 was a simple mistake - not wrongful conduct that can form the basis for a charge of inequitable conduct. (DTX 306, C-3, C-6-C-7).²³ Moreover, changing "active electrode" to "electrode terminal" cannot be material because the '882 patent, the Court's claim construction, the testimony at trial, and the jury instructions demonstrate that the terms are used interchangeably --"electrode terminal means one or more active electrodes," (D.I. 353 at 3; Tr. at 1112-13; Tr. at 1719.)

In addition, there is no evidence of intent to deceive. As the Request and trial testimony make clear, Mr. Raffle was simply trying to correct typographical errors made in the Supplemental Amendment: "It must have been a typo or an error that happened. It was a mistake. I just missed it." (Tr. at 1525; DTX 306, C-13). Smith & Nephew's assertion that Mr.

Smith & Nephew's citation to General Electro Music Corp. v. Samick Music Corp., 19 F.3d 1405 (Fed. Cir. 1994), is inapposite. (D.1. 442 at 36.) The false statement in that case was in support of a petition to undex special, which requires a "sworm statement that the applicant has made a careful and thorough search" of all the prior art. Moreover, the jury found that the applicant's statement was "material and intentionally false." Id. at 1411, 1408. In contrast, the jury here found a clerical or typographical error.

is presumed valid - the Patent Office reviewed the Request and determined that the changes would not constitute new matter, would not require reexamination, and would not materially affect the scope or meaning of the claims allowed by the examiner. (DTX 306, C-16). Smith & Nephew's theory must be rejected because it presumes its conclusion - that the Certificate is invalid.

There is no evidence whatsoever that Mr. Raffle acted with intent to deceive. Mr. Raffle admitted that he made the minor mistakes that Smith & Nephew now alleges constitute inequitable conduct. (Tr. at 1525-26.) But those types, errors, and mistakes demonstrate, at worst, stoppiness, not inequitable conduct. The requirement that intent to deceive be proved by clear and convincing evidence exists, at least in part, to prevent the distortion by infringers of routine prosecution mistakes – like Mr. Raffle's – into inequitable conduct. See Northern Telecom, 908 F.2d at 939 ("Given the ease with which a relatively routine act of patent prosecution can be portrayed as intended to mislead or deceive, clear and convincing evidence of conduct sufficient to support an inference of culpable intent is required.").

III. SMITH & NEPHEW'S ALLEGATIONS OF INFECTIOUS UNENFORCEABILITY ARE LEGALLY AND FACTUALLY BASELESS

Smith & Nephew asserts – for the first time after trial – that the alleged inequitable conduct in each of the patents-in-suit renders the others unenforceable through the doctrine of infectious unenforceability. (D.I. 442 at 36-40.)

While charges of inequitable conduct are disfavored by this Court, "charges of 'infectious inequitable conduct' [are disfavored] even more so." Eaton, 2003 WL 179992, at *1. As an initial matter, an accused infringer asserting infectious unenforceability must prove "inequitable conduct sufficient to hold at least one patent unenforceable before [the court will] considerable.

whether to hold an entire group of related patents unenforceable." Speedplay, Inc. v. Bebop Inc., 211 F.3d 1245, 1259 (Fed. Cir. 2000) (rejecting infectious unenforceability claim). If that threshold is met, "the moving party must [then] demonstrate an 'immediate and necessary relation' between the alleged inequitable conduct and enforcement of the related patents." Ronald A. Katz Tech. Licensing, J.-P. v. Verizon Communications Inc., Civ. A. No. 01-5627, 2002 WL 1565483, at *2 (E.D. Pa. July 16, 2002). Under that standard, Smith & Nephew's infectious unenforceability arguments must fail as a matter of law.

Smith & Nephew has not established an "immediate and necessary relation" between the alleged inequitable conduct with respect to any patent and enforcement of any other patent. Smith & Nephew's assertion that because the patents are related, have the same inventors, relate to the same technology, have been licensed together, were asserted in this litigation, have similar prior art references, and share common claim terms they should be unenforceable (D.I. 442 at 37) is without support. See Semiconductor Energy Lab Co., Ltd. v. Samsung Elecs. Co., 4 F. Supp. 2d 477, 493 (E.D. Va. 1998) (observing that "no Federal Circuit decision has applied the infectious unenforceability doctrine based solely upon" the facts that the patents "have a common inventor, common owner, similar prior art references, and similar subject matter"), aff'd, 204 F.3d 1368 (Fed. Cir. 2000); Baxter Int'l, Inc. v. McGaw, Inc., 149 F.3d 1321, 1332 (Fed. Cir. 1998) (reversing a finding of infectious unenforceability even though patents in question issued from a common application); Ronald A. Katz, 2002 WL 1565483, at *2 ("mere relatedness of subject matter" is insufficient to establish the relationship necessary to prove infectious unenforceability). 24

The only case upon which Smith & Nephew relies, Consolidated Ahminum Corp. v. Foseco. Int'l Ltd., 910 F.2d 804 (Fed. Cir. 1990) (D.I. 442 at 36-37), is readily distinguishable. There, the patentee intentionally withheld the best mode of practicing the invention claimed in one of the patents-in-suit, instead disclosing a fictitious, inoperable.

In addition, Smith & Nephew's allegations of inequitable conduct do not rise to the level of unconscionability. In Ristvedt-Johnson, Inc. v. Brandt, Inc., 805 F. Supp. 549, 556 (N.D. Ill. 1992), the court stated that "acts warranting application of the [infectious unenforceability] defense must rise to the level of unconscionability," and noted that in three cases where infectious unenforceability had been found, the patentees had obtained the respective patents through "brib[ing] a witness to suppress evidence, committ[ing] a perjurious act, and deliberately disclos[ing] a fictitious inoperable mode to practice a patent in suit." None of the alleged inequitable conduct of which ArthroCare is accused rises to the level of unconscionability. Id. ("[The accused infringer's] allegations — garden-variety inequitable conduct without blatant willful fraud — do not rise to the level of unconscionability that calls into question the integrity of the court. Thus, even assuming the truth of [the accused infringer's] allegations about the [various] patents, [the patentee's] alleged conduct would not support an unclean hands defense against [the relevant] patents.").

A. ArthroCare's Alleged Conduct During The '592
Prosecution Cannot Render The '882 Or '536 Patents
Unenforceable.

Smith & Nephew's first argument is that ArthroCare's alleged inequitable conduct with respect to the '592 patent renders the '882 and '536 patents unenforceable because the alleged

mode. Id. at 807-09. The patentee then filed other applications (which ultimately issued as the other patents-in-suit) that disclosed the previously withheld best mode, and relied on the disclosure of that best mode to establish the patentability of those later applications. Id. at 811-12. Because the patentee's failure to disclose the best mode in the earlier patent formed the basis for its successful arguments in prosecuting the later patents, the Federal Circuit found that the patentee's conduct "permeated the prosecuting of the patents-in-suit" and established the "immediate and necessary relation" required to find infectious unenforceability. Id. at 812. Here, by contrast, Smith & Nephew has not even alleged such a relation between the atleged inequitable conduct and the sought after enforcement of the other patents-in-suit. For example, Smith & Nephew does not even try to explain because it cannot – how the alleged failure to disclose its 2003 summary judgment briefs during the '536 reexamination could have any effect on the '882 parent that issued more than five years before the briefs were written.

irrelevant to the '592 and '882 patents because those patents were not the subject of that reexamination.

C. ArthroCare's Alleged Conduct During The '882 Prosecution Cannot Render The '592 Or '536 Patents Unenforceable.

Smith & Nephew's final argument is that ArthroCare's conduct with respect to the '882 certificate of correction infects the '592 and '536 patents because all three patents use the terms "active electrode" and "electrode terminal." (D.I. 442 at 39.) That argument makes no sense. Smith & Nephew has cited no authority to support its assertion that patents can be held infectiously unenforceable merely because they use common claim terms. Moreover, there is no basis whatsoever to allege that conduct with respect to a certificate of correction for one patent infects any other patent.

CONCLUSION

There is no evidence – much less clear and convincing evidence – to support Smith & Nephew's inequitable conduct claims. Accordingly, ArthroCare respectfully requests that the Court enter judgment of no inequitable conduct.

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July 11, 2003



TO ALL TO WHOM THESE PRESENTS; SHALL COME;

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office

December 12, 2002

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APPLICATION NUMBER: 09/098,205 FILING DATE: July 27, 1998 PATENT NUMBER: 6,224,592

ISSUE DATE: May 01, 2001

By Authority of the OMMISSIONER OF PATENTS AND TRADEMARKS

> A. Short Certifying Officer

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service "Express Mail Past Office to Addresses" service under 37 GFR 1.40 addressed to Assistant Contmissioner for Patents Washington, O.C. 2023!

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PATENT Attorney Docket No. A-2-2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

PHILIP E. EGGERS et al.
Application No.:

Filed: herewith

For: SYSTEM AND METHOD FOR ELECTROSURGICAL CUTTING AND ABLATION Examiner: unassigned Art Unit: unassigned

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR \$1.97 and \$1.98

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

The references cited on attached form PTO-1449 are being called to the attention of the Examiner. Copies of each can be found in parent Application No. 08/795,686 filed Pebruary 5, 1997.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and ... the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Applicant believes that <u>no fee is required</u> for submission of this statement, since it is being submitted prior to the first Office Action.

Respectfully submitted,

John T. Raffle Reg. No. 38,585

A-2

I hereby certify that this correspondence is being deposited with this United Status Postal Service first class mail in an envisione addressed for Assistant Commissioner for Patents,

Weshington, D.C. 2021, on

Oct. 20, 1995



Attorney Docket No. A-2-2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE RECEIVED

007 26 99) Group 3700

In re application of:

PHILIP E. EGGERS et, al.

Application No.: 09/098,205

Filed: July 27, 1998

For: SYSTEMS AND METHODS FOR ELECTROSURGICAL TISSUE TREATMENT IN CONDUCTIVE FLUID Examiner: L. Cohen Art Unit: 3739

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 CYR \$1.97 and \$1.98

5.5. 10-28-99

Assistant Commissioner for Patents Washington, D.C. 20231 ,

Sir:

The references cited on attached form PTO-1449 are being called to the attention of the Examiner. Copies of articles and foreign patents and applications are enclosed herewith. Copies of the U.S. patents can be found in parent Application No. 08/795,686 filed February 5, 1997.

Applicant also brings the following information and list of materials to the attention of the Examiner. On Pehruary 13, 1998, ArthroCare Corporation filed a lawsuit in the United States District Court for the Northern District of California against defendants Ethicon, Inc., Mitek Surgical Products, Inc., and Gynecare, Inc. alleging infringement of U.S. Patent Nos. 5,697,909, 5,697,336, 5,697,281, and 5,697,882 (the "patents-in-suit"). The case was assigned Case No. C98-00609 MHD. The litigation terminated in June 1999, with the defendants taking a license from ArthroCare under the patents-in-suit. The defendants have paid ArthroCare a license fee, and will pay ongoing royalties on sales in the United States of certain arthroscopy and gynecology products covered by these patents.

4 2

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Very recently, and after the litigation terminated, applicants were apprised by a third party of section 2001.06(c) of the Manual of Patent Examining Procedure (*MPEP*) with respect to the prosecution of applications for patents other than those at issue in the litigation and that were pending before the litigation was commenced, namely, U.S. Application Nos. 08/807,111 (now U.S. Patent No. 5,891,095), 08/766,382 (now U.S. Patent No. 5,898,198), and 08/760,768 (now U.S. Patent No. 5,766,153).

Having considered MPEP section 2001.06(c) following receipt of the correspondence from the third party, Applicant does not believe that MPEP section 2001.06(c) requires the disclosure of the above-described litigation or any materials related to that litigation in the present application. Applicant further does not believe that sump section 2001.06(c) required such disclosure in connection with any other applications that were pending after the litigation commenced. Among other things, the subject matter (i.e. the inventions recited in the claims) of this application and the other pending applications was not at insue in the litigation.

Nevertheless, applicant did bring the above-described litigation to the attention of Examiner Mendez during the prosecution of at least U.S. Application Nos. 08/807,111 (now U.S. Patent No. 5.891.095), 08/766.382 (now U.S. Patent No. 5.888.198), and 08/795,686 (now U.S. Patent No. 5,871,469), during a telephone conference relating to those applications. Applicant also submitted the prior art that was principally relied on by the defendants in the litigation to Examiner Mendez during the prosecution of U.S. Application Nos. 08/807.111 (now U.S. Patent No. 5,891,095), 08/766,382 (now U.S. Patent No. 5,888,198), and 08/795,686 (now U.S. Patent No. 5,871,469). Indeed, Applicant withdrew one of thome pending applications, U.S. Application No.08/807,111 from allowance to provide Examiner Mendez with the opportunity to consider those references. Applicant has already submitted that prior art in connection with the present application for the Examiner's consideration.

In addition, Applicant provides the following list of materials from the litigation that reflect defendants' and

Philip E. Eggers et al. Application No. 09/098,205 Page 3 of 10

ArthroCare's primary arguments relating to issues of validity and enforceability.

- ArthroCare's Complaint For Patent Infringement Of U.S. Letters
 Patent Nos. 5,697,909; 5,697,281; 5,697,882; and 5,697,536 filed
 February 13, 1998;
- Plaintiff ArthroCare's Motion For Preliminary Injunction Against Defendant Ethicon and Mitek, filed March 10, 1998.
- Answer and Counterclaim Of Defendants Ethicon, Inc., Mitek Surgical Products, Inc., and Gynecare, Inc., filed April 6, 1998;
- Plaintiff Arthrocare's Motion To Strike Affirmative Defenses And To Strike Defendants' Counterclaim In Part Or, In The Alternative, For a More Definite Statement, filed April 17, 1998;
- 5. Defendants' Opposition To ArthroCare's Motion To Strike Affirmative Defenses And To Strike Defendants' CounterClaim In Fart Or, In The Alternative For A More Definite Statement And Points And Authorities In Support Of Conditional Motion To File An Amended Answer and CounterClaim, filed May 7, 1998;
 - ArthroCare's Reply In Support of Motion To Strike Affirmative Defenses And To Strike Defendants' Counterclaim In Part Or, In The Alternative, For A More Definite Statement, filed May 14, 1998;
 - Memorandum Decision And Order Regarding ArthroCare's Motion To Strike And Defendants' Motion For Leave To File An Amended Answer And Counterclaim, issued June 5, 1998;
 - Amended Answer And Counterclaim of Defendants Ethicon, Inc., Mitek Surgical Products, Inc., and Gynecare, Inc., filed June 22, 1998;
- 9. ArthroCare's Reply to Defendants' Amended Counterclaim, filed July 6. 1998:
- 10.ArthroCare's Initial Disclosure Of Asserted Claims Pursuant To Local Rule 15-7, served March 30, 1998;
- 11.Defendants' Initial Disclosure of Prior Art Pursuant To Local Rule 16-7, served May 26, 1998;
- 12.Plaintiff ArthroCare's Corporation's Opening Claim Construction Brief, filed May 11, 1998;
- 13. Ethicon, Inc.'s Claim Construction Brief, filed May 22, 1998;
- 14. Joint Claim Construction Statement Pursuant To Civil Local Rule 16-11(b)(1) For Claim Construction Hearing, filed May 29, 1998;

Philip E. Eggers et al. Application No. 09/098,205 Page 4 of 10

- 15.Plaintiff ArthroCare's Corporation's Reply To Defendants' Claim Construction Brief, filed May 29, 1998;
- 16 Memorandum Decision And Order Regarding Claim Construction, issued July 6, 1998;
- 17.Defendants' Petition For Permission To Appeal Pursuant To 28 U.S.C. § 1292(b) filed with the U.S. Court of Appeals for the Federal Circuit on July 16, 1998;
- 18.Plaintiff's Answer To Defendants' petition For Permission To Appeal Pursuant To 28 U.S.C. § 1292(b), filed July 23, 1998;
- 19. Federal Circuit's Order On Petition For Permission To Appeal, issued August 20, 1998;
- 20. Summary Of Defendant Ethicon's Opposition To Plaintiff ArthroCare's Motion For Preliminary Injunction, filed July 23, 1998;
- 21.Ethicon's Opposition To Plaintiff ArthroCare's Motion For Preliminary Injunction, filed July 23, 1998;
- 22.Declaration Of John R. LaCourse In Opposition To ArthroCare's Motion For Preliminary Injunction, filed July 23, 1998;
- Declaration Of Robert D. Tucker Filed In Support Of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction, filed July 23, 1998;
- 24.Declaration Of Robert A. Armitage, Esq., Filed In Support Of Ethicon's Opposition to ArthroCare's Motion For Preliminary Injunction , filed July 23, 1998;
- 25.Supplemental Declaration Of Robert A. Armitage, Esq., In Support of Ethicon's Opposition To Plaintiff ArthroCare's Motion For Preliminary Injunction, filed August 4, 1998;
- 26.ArthroCare's Reply Memorandum In Support Of Motion For Preliminary Injunction, filed August 6, 1998;
- 27.Declaration Of James Doss In Support Of ArthroCare's Motion For Preliminary Injunction, filed August 6, 1998;
- 28.Reply Declaration Of Philip E. Eggers In Support Of ArthroCare's Motion For Preliminary Injunction, filed August 6, 1998;
- 29.Reply Declaration Of John T. Raffle In Support Of ArthroCare's Motion For Preliminary Injunction, filed August 6, 1998;
- 30 Ethicon's Supplemental Opposition To Plaintiff ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998.

Philip E. Eggers et al. Application No. 09/098,205 Page 5 of 10

- 31.Supplemental Declaration Of Robert D. Tucker, Ph.D. M.D., Filed In Support Of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998;
- 32.Supplemental Declaration Of John R. LaCourse, Ph.D., Filed In Support Of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998;
- 33.Direct Examination Of Robert D. Tucker, Ph.D., M.D., Filed In Support Of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction; filed September 3, 1998;
- 34.Direct Examination of Robert A. Armitage, Esq., Filed In Support of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998;
- 35.Direct Examination of John R. LaCourse, Ph.D., Filed In Support of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998;
- 36.ArthroCare's Supplemental Memorandum In Response To The
 Supplemental Declaration Of Robert A. Armitage, filed September 3,
 1998;
- 37 Direct Testimony Of John T. Raffle In Support Of ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998;
- 38.Direct Testimony Of Philip E. Eggers In Support Of ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998;
- 39.Joint Statement Regarding Differences Between The Two Translations Of The Elsasser And Roos Article Proffered By Defendants, filed September 22, 1998;
- 40 Memorandum Decision And Order Regarding Preliminary Injunction Motion, issued December 2, 1998;
- 41.Ethicon's Response To ArthroCare's First Set of Interrogatories To Defendant Ethicon, served November 6, 1998;
- 42.Plaintiff ArthroCare's Response To Defendant Gynecare, Inc.'s First Set Of Interrogatories, served November 10, 1998;
- Plaintiff ArthroCare's Response To Mitek's First Set Of Interrogatories, served November 10, 1998;
- 44.Plaintiff ArthroCare's Response To Defendant Ethicon, Inc.'s First Set of Interrogatories, served November 10, 1998;
- 45. Plaintiff ArthroCare's Objections And Responses To Defendants' First Set Of Requests For Admissions, served January 4, 1999;

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- 46.Plaintiff ArthroCare's Objections and Responses To Defendant Opnecare, Inc.'s Second Set Of Interrogatories, served January 4, 1999.
- 47.Plaintiff ArthroCare's Supplemental Objections and Responses to Defendants' Request For Admission No. 36, served January 5, 1999;
- 48.Expert Witness Report of John R. LaCourse, served January 8, 1999;
- 49. Expert Witness Report of Robert D. Tucker, served January 8, 1999:
- 50.Expert Witness Report of David J. Parins, served January 8, 1999;
- 51.Expert Witness Report of Robert A. Armitage, Esq., served January 8, 1999:
- 52.Expert Witness Report of Massoud Motamedi, Ph.D., served January 8,
- 53.Expert Witness Report of Ashley J. Welch, Ph.D., served January 8, 1999;
- 54.Responsive Expert Report of Leslie A. Geddes, Ph.D., served January 29, 1999;
- 55.Responsive Expert Report of Donald W. Banner served January 29, 1999:
- 56.Supplemental Expert Report of David J. Parins served February 9, 1999;
- 57. Ethicon's Motion For Summary Judgment Of Invalidity For Failure To Satisfy The Requirements of 35 U.S.C. §§ 102-103, filed March 5, 1999;
- 58. Joint Statement Of Uncontested Facts In Support Of Ethicon's Motion For Partial Summary Judgment Of Invalidity Under 35 U.S.C. §§ 102 and 103. filed March 5, 1999;
- 59.Plaintiff ArthroCare's Opposition To Defendants' Motion For Summary Judgment Of Invalidity Under 35 U.S.C. 85 102-103, filed March 18, 1999;
- 60.Ethicon's Reply Memorandum In Support Of Motion For Summary Judgment Of Invalidity Under 35 U.S.C. §§ 102 and 103, filed March 25, 1999;
- 61 Ethicon's Motion For Partial Summary Judgment Of Invalidity For Failure To Satisfy The Requirements of 35 U.S.C. § 112, filed March 5, 1999;

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- 62. Joint Statement Of Uncontested Facts In Support of Ethicon's Motion For Partial Summary Judgment For Invalidity For Failure To Satisfy The Requirements Of 35 U.S.C. \$ 112, filed March 5, 1999;
- 63.Plaintiff ArthroCare's Opposition To Defendants' Motion For Partial Summary Judgment Of Invalidity For Failure To Satisfy The Requirements Of 35 U.S.C. § 112, filed March 18, 1999;
- 64.Ethicon's Reply Memorandum In Support Of Motion For Partial Summary Judgment Of Invalidity For Failure To Satisfy The Requirements Of 35 U.S.C. § 112, filed March 25, 1999;
- 65. Declaration of Leslie A. Geddes, Ph.D., In Support of ArthroCare's Oppositions To Defendants Motions For Partial Summary Judgment, filed March 18, 1999;
- 66 Plaintiff ArthroCare's Motion For Partial Summary Judgment That. Claims Are Not Anticipated Or Rendered Obvious By Certain References, filed March 5, 1999;
- 67 Ethicon's Opposition To ArthroCare's Motion For Partial Summary Judgment That Claims Are Not Anticipated Or Rendered Obvious By Certain References, filed March 18, 1999;
- 68.ArthroCare's Reply Brief In Support Of ArthroCare's Motion For Partial Summary Judgment That Claims Are Not Anticipated Or Rendered Obvious By Certain References, filed March 25, 1999;
- 69.Plaintiff ArthroCare's Motion For Partial Summary Judgment Of No Inequitable Conduct Or, Alternatively, For Bifurcation, filed March 5, 1999;
- 70. Joint Statement Of Undisputed Facts In Support Of ArthroCare's Motion For Partial Summary Judgment Of No Inequitable Conduct Or, Alternatively, For Bifurcation, filed March 5, 1999;
- 71.Ethicon's Opposition Of Plaintiff ArthroCare's Motion For Partial Summary Judgment Of No Inequitable Conduct Or Alternatively For Bifurcation, filed March 18, 1999;
- 72.Declaration of Robert A. Armitage, Esq., In Support Of Defendant Ethicon, Inc.'s Opposition To ArthroCare's Motion For Summary Judgment, filed March 18, 1999;
- 73.Plaintiff ArthroCare's Reply Brief In Support Of Its Motion For Partial Summary Judgment Of No Inequitable Conduct Or, Alternatively, For Bifurcation, filed March 25, 1999;

Philip E. Eggers et al. Application No. 09/098,205 Page 8 of 10

- 74.Plaintiff ArthroCare's Motion for Partial Summary Judgment That Defendants Cannot Prevail On Their Enablement And Written Description Defenses As To Certain Claims, filed March 5, 1999.
- 75 Joint Statement Of Undisputed Facts In Support Of ArthroCare's Motion For Partial Summary Judgment That Defendants Cannot Prevail Under Enablement And Written Description Defenses As To Certain Claims, filed March 5, 1999:
- 16.Ethicon's Opposition To ArthroCare's Motion For Partial Summary Judgment That Defendants Cannot Prevail On Their Enablement And Written Description Defenses As To Certain Claims, filed March 18, 1999;
- 77.ArthroCare's Reply Brief In Support Of ArthroCare's Motion For Partial Summary Judgment That Defendants Cannot Prevail On Their Enablement And Written Description Defenses As To Cortain Claims, filed March 25, 1999;
- 78.Defendants' Trial Brief On The Issues Of Unenforceability And Invalidity Under 35 U.S.C. §§ 102, 103, and 112, filed March 29, 1999;
- 79 Plaintiff ArthroCare's Trial Brief Re: Validity and Enforceability Of The Patents-In-Suit, filed April 7, 1999;
- 80.Defendants' Notice Of Prior Art Fursuant To 35 U.S.C. § 282, filed April 9, 1999;
- 81 April 26, 1999 Letter From Defendants To The Court Regarding Additional Claim Construction Issues;
- 82. Joint Proposed Jury Instructions For Claims 46, 55, 58, 59, 61, and 62 of U.S. Patent No. 5,697,536;
- 83.April 30, 1999 Letter From ArthroCare To The Court Regarding Additional Claim Construction Issues;
- 84. Expedited Motion Of Plaintiff ArthroCare Corporation Regarding Joint Jury Instructions, filed May 13, 1999;

In addition to the above-listed materials; there are numerous other papers that were filed with the Court in connection with the above-referenced litigation. Furthermore, depositions were taken of numerous witnesses regarding validity and enforceability issues. If the Examiner desires, Applicant will submit any or all of the listed material, the other papers filed with the court, and/or

Philip E. Eggers et al. Application No. 09/098,205 Page 9 of 10

transcripts of depositions to the Examiner for consideration. Applicant will also provide any additional information that the Examiner desires about the litigation or the materials described herein.

Applicant respectfully requests that the Examiner advise Applicant in writing whether he wishes any additional information about the litigation or any of the litigation-related materials described herein or wishes Applicant to submit any materials to the Examiner for consideration.

The following is a list of co-pending applications, including this application, relating to the technology covered by this application:

Applic. #	Filing Date	Applic. #	Filing Dat
08/761,096	12/05/96	09/183,838	10/30/98
08/562,332	11/22/95	09/002,254=	. 12/31/97
08/942,580	10/02/97	09/054,660	. 04/03/98
08/942,579	10/02/97	09/338,842	06/23/99
08/970,239	11/14/97	09/347,390	07/06/99.
08/970,242	11/14/97	09/062,869	04/20/98
08/874,173	06/13/97	09/354,835	07/16/99
09/026,852	02/20/98	09/002,315	01/02/98
09/041,934	03/13/98	09/083,533	05/22/98
09/258,516	02/26/99	09/109,219	06/30/98
09/098,205	07/27/98	09/058,571	04/10/98
09/134,542	08/13/98	09/357,774	07/21/99
09/177,861	10/23/98	09/357,778	07/21/99
09/262,281	03/04/99	09/032,375	02/27/98
09/314,247	05/18/99	09/058,336	04/10/98
09/273,612	03/22/99	09/248,763	02/12/99
09/360,075	07/23/99	09/314,611	05/19/99
09/010,382	01/21/98	09/361,674	07/27/99
09/197,013	11/20/98	08/977,845	11/25/97
09/330,275	06/11/99	09/313,956	05/18/99
09/372,454	08/11/99	08/978,340	11/25/97
09/089,012	06/02/98	09/313,957	05/18/99
09/313,955	05/18/99	09/162,110	09/28/98
09/162,117	09/28/98	09/205,640	12/03/98
09/293,231	04/16/99	08/990,374	12/15/97
09/083,526	05/22/98	09/054,323	04/02/98
09/074,020	05/06/98	09/136,079	08/18/98
09/268,616	03/15/99	09/295,687	04/21/99
09/181,936	10/28/98	09/026,851	02/20/98
09/345,665	06/30/99	09/345,400	07/01/99
09/026,698	02/20/98	09/130,804	08/07/98
09/316,472	05/21/99		

Philip E. Eggers et al. Application No. 09/098,205 Page 10 of 10

It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Applicant believes that <u>no fee is required</u> for submission of this statement, since it is being submitted prior to the first Office Action.

Respectfully submitted,

John T. Raffle Reg. No. 38,585

FORM PTO-1449 (Modified)			Attorney Docket No. A-2-2		Serial No.: 09/098,205		
		DISCHOSTIPES					
•		00 15 200 mg	Applicant: PHILIP E. EGG	ERS et al.			
The manual state of		Filing Date: Group: 3739 July 27, 1998					
Reference Des	iguation	U.S.	PATENT DOCUMENTS				
Examiner Initial	Document No.	Date	Name	Class	Sub-class	Filing Date (If Appropriat	
P.M	5,647,869	07/15/97	Gobie et al.	. 606	37	1	
AB	4,232,676	11/11/80	Herczog	128	303	-	
_AC	5,330,470	. 07/19/94	Hagen	606	42		
_ AD	5,700,262	12/23/97	Acosta et al.	606	48		
_ AE	5,192,280	03/09/93	Parius	606	48		
_ AF	5,035,696	07/30/91	Rydell	606	47	•	
AG .	5,441,499	08/15/95	Fritzsch .	606	45		
_AH	5,749,869	05/12/98	Lindennicier et al.	606	34		
<u>-</u> 41	5,584,872	12/17/6 754	LaFontaine et al.	607	116		
_ AJ	5,676,693	10/14/97	LaFontaine	607	116		
_AK	5,496,312	03/05/96	Klicek	606	34		
_ AL	5,514,130	05/07/96	Baker	606 .	41		
_AM	5,807,395	09/15/98	Mulier et al.	606	41		
_AN	4,709,698	12/01/87	Johnston et al.	128	303		
		FOREIG	N PATENT DOCUMENTS				
	Dосимент No.	Dete	Country	Class	Sub-class	Translation (yes/on)	
1A0	0 754 437	01/22/97	EP .	A61B	17/39		
_ AP	97/24073	07/10/97	WIPO	A61B	17/39		
_ AQ	97/24993	07/17/97	WIPO .	A61B	17/39		
_AR	97/48346	12/24/97	WIPO	A61B	17/39		
AS	97/24994	07/17/97	WIPO	A61B	17/39		
	OT	RER ART (Including	Author, Title, Date, Pertine	nt Pages, Etc.)		
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EXAMINER: Initial if reference considered, whether or not ciusion is in conformance with MPEP 609; Draw line through ciudion if not in conformance and not considered, because of this form with west computationals as well-cont.

	ENTS AND PUBLE S INFORMATION		Attorney Docket No.	Serial N 09/098,		
		198	Applicant: PHILIP E. EGO	ERS et al.	•	
	*	ans,	Filing Date: July 27, 1998	Group:	3739	
Reference Des	ignation	TA TRADE	S. PATENT DOCUMENTS			-
Examiner Initial	Document No.	Date	Name	Class	Sub-class	Filing Date (If Appropriate
PENT	4,955,377	09/11/90	Lennox et al.	128	401	
LAU	5,885,277	01/23/99	Korth	606	35	
AV	5,891,095	04/06/99	Eggers et al.	604	114	
_ AW	5,697,281	12/16/97	Eggers et al.	604	114	
AX	5,681,782	10/28/97	Eggers et al.	604	114	
_AY	5,697,536	12/16/97	Eggers et al.	604	114	
_AZ	5,697,882	12/16/97	Eggers et al.	604	114	· ·
BA	5,697,909	12/16/97	Eggers et al.	604	114	
_BB	5,766,153	06/16/98	Eggers et al.	604	114	
BC :	5,810,764	09/722/98	Eggers et al.	604	23	
_ BD	5,683,366	11/04/97	Eggers et al.	604	114	
_ BE	5,902,272	05/11/99	Eggers et al.	604	114	
_BF	5,897,553	04/27/99	Mulier et al.	606	114	
_BG	5,556,397	09/17/96	Long et al.	606	114 .	-
		FORE	IGN PATENT DOCUMENTS			
	Document No.	Date	County	Class	Sub-class	Translation (yes/10)
ÇBH	57-5780Z	04/05/82	Japan	A61B	1/100	
BI	96/00042	01/04/96	WIPO	A61B	17/39	
BI	95/34259	12/21/95	. WIPO	A61F	5/48	
_ BK	WO 97/48345	12/24/97	WIPO	AGIB	17/39	
BL.	98/27880	07/(32/98	WIPO	A61B	17/39	-
	от	TER ART (Includi	ng Author, Title, Date, Pertine	ent Pages, Etc.)	
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TO AME TO WHOM THESE PRESENTS SHAME COMES

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

December 12, 2002

THIS IS TO CERTIFY THAT ANNEXED IS A TRUE COPY FROM THE RECORDS OF THIS OFFICE OF THE FILE WRAPPER AND CONTENTS OF:

APPLICATION NUMBER: 09/098,205 FILING DATE: July 27, 1998 PATENT NUMBER: 6,224,592 ISSUE DATE: May 01, 2001

> By Authority of the COMMISSIONER OF PATENTS AND TRADEMARKS

> > P. R. GRANT
> > A-15 Certifying Officer

PART (1) OF (3) PART(S)



UNITED STATES DE. IRTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPU	CATION NO.	FILING DATE		FIRST NAMED INVENTOR			DOCKET NO.
	2979	92,195 d	772779a	E66675			6-3-2
_	0213			9M1276229		EXAMINER	
•	ARTH	ROCAPE COR		691276225		COHEN.	L.
		N PASTORIA YVALE CA 9:			ART UNIT	PAI	PER NUMBER
		,				3739 (U

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Palents and Trademarks

02/29/00

	Application No. 09/098-205	Applicant(s)	*.	,		
Office Action Summary	Examiner		Group Art Unit	INDEPENDENCE PROPERTY OF		
	Lea S. Coh	en	3739			
X Responsive to communication(s) filed on Jan 31, 2000	<u> </u>					
[] This action is FINAL.						
Since this application is in condition for allowance exc in accordance with the practice under Ex parte 'Quayle			on as to the mer	rits is closed		
A shartened statutory period for response to this action is is longer, from the mailing date of this communication. Fr application to become abandoned, (36 U.S.C. § 133), Et 37 CFR 1.136(a).	ailure to respond with	in the perio	d for response v	vill cause the		
Disposition of Claims						
Claim(s) 80, 81, and 83-159 .		is/are	pending in the a	application.		
			ithdrawn from a	ansideration.		
Claim(s)		i	s/are allowed.	- 54		
Claim(s) 80, 81, 83-85, 87-102, and 138-159		i	s/are rejected.			
Claim(s) 86	· · · · · · · · · · · · · · · · · · ·	is/are objected to.				
Claims	are subjec	t to restrict	ion or election (equirement		
Application Papers						
See the attached Notice of Draftsperson's Patent D	swing Review, PTO-	948.				
The drawing(s) filed onis/are	objected to by the Ex	aminer.				
The proposed drawing correction, filed on	is Dep	proved [disapproved.	į		
☐ The specification is objected to by the Examiner.						
The nath or declaration is objected to by the Examin	ner.					
Priority under 35 U.S.C. § 119						
Acknowledgement is made of a claim for foreign pri	lority under 35 U.S.C	. § 119(a)-(d).	_		
□ All □ Some* □ None of the CERTIFIED cop	sies of the priority do	cuments ha	ve been	-		
teceived.						
ceceived in Application No. (Series Code/Series	Number)			i		
received in this national stage application from	n the International Bu	reau (PCT i	iule 17.2(a)}.	1		
*Certified copies not received:				·		
Acknowledgement is made of a claim for domestic	priority under 35 U.S	.C. § 119(e	} _			
Attachment(s)				1		
Notice at References Cited, PTO-892				İ		
Information Disclosure Statement(s), PTO-1449, Page	oer Nois).			1		
Li Interview Summary, PTO-413						
☐ Notice of Oral(sperson's Patent Orawing Review, P) ☐ Notice of Informal Patent Application, PTO-152	rO-948					
G AGREE OF INTORNEL PATENT Appacation, PTU-152				7		
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SEE OFFICE ACTION	ON THE FOLLOWING	PAGES -				

Art Unit; 3739

Claims 103-137 stand withdrawn from further consideration by the examiner, 37

CFR 1.142(b) as being drawn to a non-elected invention. Election was made without traverse in

Pager No. 6.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 90-92, 102, and 138-159 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 90 - "the probe" in line, 3 lacks antecedent basis. Claim 102 - "the electrically conducting fluid" lacks antecedent basis. Claim 138 - "the electrode, terminal" in lines 7 and 8 lacks antecedent basis. Claims 141, 143, 144, 146-148, 150-152, and 157-159 - "the electrode terminal" lacks antecedent basis. Claim 159 - the probe and its recited elements lack antecedent basis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country of in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who have fulfilled the requirements of paragraphs (1), (2), and (4) of section 3710 of this fulfe before the invention thereof by the applicant for patent.

Application/Control Number: 09/098,205

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Claims 80, 81, 83-85, 89, 90, 92, 98-100, 138-143, 148, 150, and 156-158 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Roos (4,116,198). The device includes a spaced return electrode as shown by Figure 1. A washing fluid passes through the axial lumen of the device. Since the return electrode is removed from the body structure, a conductive fluid must complete the current flow path.

Claims 80, 81, 83-85, 87, 89, 90, 92, 94-96, 98-102, 138-143, 145, 147, 148, 150, 152-154, and 156-159 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Mulier et al (5,609,151). Applicant's attention is directed to embodiment disclosed in Figures 3 and 4 as detailed at column 6, lines 17-59. Electrodes 202 and 216 may be used in conjunction with one another which would space the ring electrode 216 from the electrode terminal 202.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is one identically disclosed or described as as forth in section 102 of this title, if the differences between the subject nations rought to be presented and the prior are are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 87 and 145 are rejected under 35 U.S.C. 103(a) as being unpatentable Roos in view of Mulier et al (5,609,151). The particular fluid for similar methodology is taught by Mulier et al. Accordingly, it would have been within the level of skill of the artisan to select isotonic saline to optimize performing the treatment.

Claims 88, 93, 146, and 151 are rejected under 35 U.S.C. 103(a) as being unpatentable Roos/Mulier et al in view of Baker (5,514,130). Controlling current flow based upon impedance Application/Control Number: 09/098,205

Art Unit: 3739

or temperature is taught by Baker. Accordingly, it would have been within the level of skill of the artisan to control the current to optimize performing the treatment in light of this teaching.

Claims 91 and 149 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roos or Mulier et al. The particular voltage would have been within the level of skill of the artisan to select to optimize performing the treatment.

Claims 97 and 155 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roos or Mulier et al. The particular material would have been within the level of skill of the artisan to select to optimize performing the treatment.

Claim 86 is nbjected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 144 would be allowable if rewritten to overcome the rejection(s) under 35
U.S.C. 112, 2** paragraph, set forth in this Office action and to include all of the limitations of the -base claim and any intervening claims.

Any inquiry concerning this communication should be directed to Lee S. Cohen at telephone number (703) 308-2998.

> Lee Cohen Primary Examinar

GA43739

This correspondence is being deposited with the United States Postal Sovice as first class mall in an envelope addressed to Assistant Commissioner for Patents

on May 25, 2000

MAG 3 0 7000

Attorney Ducket No. A-2-2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

PHILIP E. EGGERS et al.

Examiner: L. Cohen

Application No.: 09/098,205

Art Unit: 3739

Filed: July 27, 1998

AMENDMENT

For: SYSTEMS AND METHODS FOR ELECTROSURGICAL TISSUE TREATMENT IN CONDUCTIVE FLUID

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

In response to the Office Action mailed February 29, 2000, please amend the above-identified application as follows.

IN THE CLAIMS:

Please cancel claim 159 and amend claims 90, 102, 138, 141, 143, 144, 146-148, 150-152, 157 and 158 as follows:

90. (Twice Amended) The method of claim 80, wherein the active return electrode is located on a distal end of an instrument shaft, further comprising an insulating matrix on the [probe] instrument shaft between the return electrode and the active electrode [terminal], the insulating matrix comprising an inorganic material.

Philip E. Eggers et al, Serial 140, 09/098,205 Fage 2

(Twice Amended) The method of claim 99 wherein the return electrode is an older tubular member defining an axial passage between the outer surface of the probe and the inner surface of the outer tubular member, the delivering step including directing the electrically [conflucting] confluctive fluid through the axial passage to the distal end of the probe over the active-electrode [terminal].

1336. (Amended) A method for applying electrical energy to a target site on a body structure on or within a patient's body, the method comprising:

contacting an active electrode with the body structure in the presence of an electrically conductive fluid;

spacing a return electrode away from the body structure in the presence of the electrically conductive fluid; and

applying a high frequency voltage difference between the active electrode [terminal] and the return electrode such that an electrical current flows from the active electrode [terminal], through the electrically conductive fluid, and to the return electrode.

A. (Amended) The method of claim 128 further comprising immersing the target site within a volume of the electrically conductive fluid and positioning the return electrode within the volume of electrically conductive fluid to generate a current flow path between the active electrode [terminal] and the return electrode.

343. (Amended) The method of claim The wherein the active electrode (terminal) comprises a single active electrode disposed near the distal end of an instrument shaft.

444. (Amended) The method of claim 13% wherein the active electrode (terminal) includes an array of electrically isolated electrode terminals disposed near the distal end of an instrument shaft. Philip E. Eggers et al. Serial No. 09/098,205

Page 3

[146. (Amended) The method of claim 138 including independently controlling

current flow to the active electrode [terminal] based on electrical impedance between the active electrode Iterminall and the return electrode.

[47] (Amended) The method of claim 138 wherein the return electrode is spaced from the active electrode [terminal] such that when the active electrode [terminal] is brought adjacent a tissue structure immersed in electrically conductive fluid, the remm electrode is spaced from the tissue structure and the electrically conductive fluid completes a conduction path between the active electrode [terminal] and the return electrode.

148. (Amended) The method of claim 138, wherein the return electrode is located on a distal end of a probe, further comprising an insulating matrix at the distal tip of the probe between the return electrode and the active electrode [terminal], the insulating matrix comprising an inorganic material. .

3 150. (Amended) The method of claim 138 further comprising applying a sufficient voltage difference between the return electrode and the active electrode fterminall to effect the electrical breakdown of tissue in the immediate vicinity of the active electrode fterminal).

151. (Amended) The method of claim 138 further comprising measuring the remperature at the target site and limiting power delivery to the active electrode [terminal] if the measured temperature exceeds a threshold value.

352. (Amended) The method of claim 138 further comprising applying a sufficient high frequency voltage difference to vaporize the electrically conductive fluid in a thin layer over at least a portion of the active electrode [terminal] and to induce the discharge of energy to the target site in contact with the vapor layer.

Philip E. Eggers et al. Serial No. 09/098,205

Page 4

3

157. (Amended) The method of claim 138 wherein the active electrode ferminal] is localed on the distal end of a probe, and wherein the delivering step comprises supplying the electrically conductive fluid to a proximal end of an axial lumen within the probe and directing the fluid through a distal end of the axial lumen to the active electrode (terminal).

158. (Amended) The method of claim 138 further including positioning a distal end of a fluid supply shaft adjacent the active electrode [terminal], the delivering step comprising directing the electrically conductive fluid through an inner turnen in the fluid supply shaft that is electrically connected to the return electrode and discharging the fluid through an open distal end of the supply shaft towards the active electrode [terminal].

REMARKS .

Claims 80, 81 and 83-158 are pending. Applicant has canceled claim 159 and amended claims 90, 102, 138, 141, 143, 144, 146-148; 150-152, 157 and 158 to address the Examiner's 112 rejections on page 3 of the Office Action.

The majority of the claims stand rejected as being anticipated by Roos and Mulier. Applicant disagrees with these rejections. The instant application discloses and claims, in part, novel methods for performing, and systems used to perform, electrosurgery in the presence of electrically conductive fluid. For example, in performing electrosurgery according to the method of claim 80, the active and return electrodes of the instrument are both positioned near a tissue site in the presence of electrically conductive fluid, such as isotonic saline or Ringer's lactate. The return electrode is spaced away from the tissue such that electric current flows from the scrive electrode, through the conductive fluid, to the return electrode.

independent claims 80 and 138 each require that the return electrode be spaced from the tissue. Mulier does not disclose or suggest this feature. Mulier discloses a monopolar electrosurgery device that requires a return pad attached to the patient's skiu. Thus, the return electrode is always in contact with the tissue. Both efectrodes 202 and 216 of the Mulier device are active electrodes that provide besinns in the tissue. Return electrodes are

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not used to create lesions in tissue. Electrical current does not flow from electrode 202 to 216. Rather, the current flows from either, or both, electrode(s) 202, 216 to a return pad electrode (not shown).

Moreover, Mulier does not disclose that the conductive fluid creates a conductive path between the active and return electrodes. As discussed above, the return electrode in the Mulier device is a dispersive return pad placed on the outer surface of the patient's skin. The conductive fluid in Mulier is used to expand the size of the lesion by spreading the effective area of the electrical current across a wider area (col. 2, lines 10-12). With active electrode 202, tile conductive fluid helps create a helical ablation zone because it spreads the current density from the tip of the active electrode 202 to a wider zone. This ablation zone would not be created in such a fashion if electrode 216 were acting as a return electrode. Likewise, with active electrode 216, the conductive fluid creates a conductive path to the tissue, and helps create a conical ablation zone. Again, this conical ablation zone would not be created if the current were flowing from electrode 216 to electrode 202.

In light of the above, applicant requests that the Examiner withdraw the rejections over the Mulier reference.

Turning to Roos, independent claims 80 and 138 each require that both the active and return electrodes be operated in the presence of "electrically conductive fluid" during electrosurgery. Because the Roos '198 Patent does not disclose the use of electrically conductive fluid with any devices disclosed therein, it cannot anticipate any of the claims of this application.

The Roos '198 Patent never describes the use of "electrically conductive fluid" during electrosurgery. The Roos '198 Patent only discloses the use of an unspecified "washing liquid" that flows through the endoscope that houses the treatment and neutral electrodes. See Roos '198 Patent at 4:51-57, Fig. 1. The Roos '198 Patent does not state that the "washing liquid" that is supplied to the region of the surgical site is electrically conductive fluid. This omission is significant, because numerous non-conductive washing liquids, such as distilled water, glycine, sorbitol, and the like, have been used in electrosurgery and are still in use today. See, e.g., U.S. Patent No. 4,936,301 to Rexroth, et al. at 1:62-64 and 2:4-7.

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In fact, the Roos '198 specification makes clear that the "washing liquid' delivered to the surgical site in the Roos '198 Patent is not electrically cooductive. The Roos '198 Patent states at column 6, lines 51-53 that 'the neutral electrode 11 in the form of a steel band rests on the tissue in large area form, so that good electrical contact is ensured.' If the "washing liquid" were electrically conductive, there would be no need for the neutral electrode to rest on the tissue in large area form to ensure good electrical contact; electrical contact between the neutral electrode and the cutting electrode would be ensured by the 'washing liquid' itself. The statement in the Roos '198 Patent that tissue contact with the neutral electrode is needed to ensure electrical contact plainly shows that the 'washing liquid' described in the Roos '198 Patent could not have been electrically conductive.

A later-issued patent to the same named inventor, U.S. Patent No. 4,706,667 ("the Roos '667 Patent") to Roos, demonstrates unequivocally that the "washing liquid" disclased in the Roos '198 Patent was not electrically conductive. Applicant has enclosed a copy of the Roos '667 patent for the convenience of the Examiner. The Roos '198 Patent claims priority, to German Patent Application No. 2521719 ("German Patent Application"). The Roos '667 Patent explains at column 1 lines 14-29 that the device described in the German Patent Application (and thus in the Roos '198 Patent) did not work to cut tissue because the medium in contact with the electrodes was not electrically conductive:

In a known electro-surgical high frequency cutting instrument of this kind (DE-OS No. 25 21 719) the neutral electrode is admittedly arranged in the immediate vicinity of the cutting electrode, it is however so separated from the tissue by a plastic cover, or by its arrangement in an endoscope, that it can only enter into electrical confact with the cutting electrode electrolytically via the secretion which is present during the cutting process. As a result, it is difficult to maintain the current intensity required for trouble free cutting in a required precisely defined manner at the cutting electrode. Thus, if the power setting at the r.f. generator is too high, burns can result or, if the power setting is too low, then a poor cut or indeed injury occurs because the tissue to be cut stricks to the cutting electrode as a result of congulation processes. Philip E. Eggers et al. Serial No. 09/098,205 Page 7

According to the Roos '667 Patent, the device disclosed in the parent application to the Roos '198 Patent (and thus in the Roos '198 Patent itself) did not work because there was insufficient electrical contact between the neutral and cutting electrodes to cut tissue, even though the electrodes were in the "immediate vicinity" of one another. If the Roos '198 Patent had delivered electrically conducting fluid to the tissue site, such as isotonic saline, then the Roos '667 Patent surely would not have stated, as it did, that the cutting and neutral electrodes "only enter into electrical contact" with each other "via the secretion which is present during the cutting process." If Roos '198 had delivered electrically conducting fluid to the tissue site, there would have been an electrical connection between the cutting and neutral electrodes by virtue of the electrically conducting fluid itself, regardless of whether bodily secretions were present. Plainly, Roos '198 used non-conducting "washing liquid" and attempted to rely on bodily secretions from the cutting process to make the non-conductive "washing liquid" more conductive. According to the Roos '667 Patent, these secretions did not make the non-conductive "washing liquid" electrically conductive.

Significantly, the Roos '667 Patent did not solve the electrical contact problem described in the Roos '198 Patent by introducing electrically conductivity by disclosing a device Rather, the Roos '667 Patent solved the problem of poor conductivity by disclosing a device in which both the cutting and neutral electrodes were in physical contact with the tissue so that current could flow from the cutting electrode, through the tissue, and to the return electrode, not through electrically conducting fluid:

The instrument is first of all placed in accordance with FIG. 1 onto the tissue 16 which is to be separated by means of a cut, with a concave ring-like contact surface 14 being formed between the tissue 16 and the neutral electrode 11 and with a very small funael-like contact surface 15 being formed between the tip of the cutting electrode 12 and the tissue 16. If the r.f. generator is now switched on then an r.f. current indicated by the current lines 28 flows between the cutting electrode 12 and the neutral electrode 11.

Because the Roos '198 Patent does not disclose or enable electrosurgical ablation in the presence of electrically conductive fluid, it cannot anticipate claims containing such an element. PPG Indus., Inc. v. Guardian Indus. Corp., 75 F.3d 1558, 1566 (Fed. Cir. 1996) Philip E. Eggers et al. Serial No. 09/098,205 Page 8

("To anticipate a claim, a reference must disclose every element of the challenged claim and enable one skilled in the art to make the anticipating subject matter.").

In light of the above, applicant requests that the Examiner withdraw the rejections over Ross.

Applicant believes that all claims are in condition for allowance. If the Examiner has any questions or concerns regarding this matter, please call the undersigned at 408.736-0224.

Respectfully submitted,

John T. Raffle Reg. No. 38,585

ArthroCare Corporation 595 N. Pastoria Avc. Sunnyvale, California 94086 (408) 736-0224

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLUSURE STATEMENT [Use several sheets if accessing]			Attorney Docket No. Serial No.: unassigned Serial No.: unassigned			
			Applicant: PHILIP E.	EGGERS e	tal.	
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Reference	Designation	U.S	- PATENT DOCUMENTS			
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SE AA	4,040,426	08/09/77	Morrison, Jr.	128	303	
AB	4,116,198	09/26/78	Roos ·	128	303	
AC	4,548,207	10/22/85	Reimcls	128	303	
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, AJ	5,176,528	01/05/93	Fry et al.	439	181	
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. AH	94/08654	04/28/94	WIPO	AGIM	37/00	
AN	0 597 463	05/18/94	Bb	AGIN	5/04	
	CTHURK ART (Including Aut	bor, Title, Date, Perti	nent Fage	e, Rtc.)	
D. GEAO	V.B. Bleasser	et al. Acta H	edicotechnics 24(4):1:	29-134 (1:	976).	
A.P	M. Buchelt et	al. Lasers In	Surgery and Medecine	11:271-27	(1991) -	
-40	J. Costello La	sets in Surye	ry and Hedecine 12:121	-124 (199	2)	
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United States Patent 1191

[13] 4,116,198 [15] Sep. 26, 1978

Ruu	<u> </u>	
[54]	FLECTRO	- SURGICAL DEVICE
[75]	Inventors	Derhard Ross, Tuttlingen, Fed. Rep. of Germany
(73	Assignee:	DELMA, elektra und medizinische Apparatebangesellschaft aub.H., Tuttbagen, Fed. Rep. of Germany
[21]	Appl No.	686,600
[22]	Film	May 14, 1976
[OC]	Partig	Application Priority Data
М	7 15, 1975 PC	E Fed. Rep. of Germany 1521729
1411	In Cla	A61B 17/31

May	15, 197	DE	Fed, Rep. of Germany 2521729
1721			A61B 17/31 178/343,15 128/303,13-303,12

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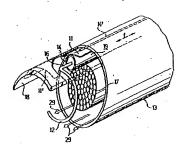
FOREIGN PATENT DOCUMENTS

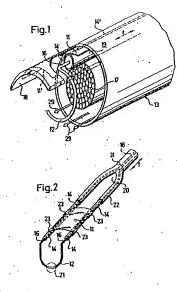
1,439,302	1/1964	France (28/30).07 Fed. Rep. of Germany 126/303.44 Usited Kingdom 126/303.48	

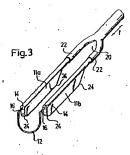
7 ABSTRACT

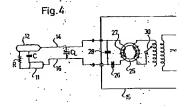
[37] ARSTRACT
Electromagical device with an ineflacted cable which can be paned through an erobacope, to which can be paned through an erobacope, to which can be pool being insulated from earth polarith and on whater and facing the body caviey is provided a small area restructed electrode projecting from the resistance and facing periodic projecting from the resistance and facing periodic projecting from the resistance and facing projecting and the resistance and facing projecting from the projecting

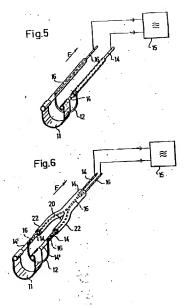
20 Claims, 5 Drawing Figures

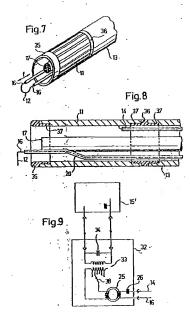












RESCURO - SURGICAL DEVICE

BACKGROUND OF THE INVENTION

The invention relates to an electric-surgical device 5 with an insulated cable which can be passed through anwith a manner case which can be connected the pole of a indexcept, to which can be connected the pole of a high frequency generator, and pole being mustated from earth potential and on whose end feeing the body cavity is provided a small-area treatment electrode procavity in provision a small-serve transcent deciration period from the endoscope, and thratment electrode cooperating with a large-area neutral electrode contected to the other pole of the high frequency generator which it insulated from carried potential in such a way that due to the high carriest density in the area of the 13 man one to ten fight carrest access in the area of the treatment electrode, a generation of best taken place which is adoquate for separating or congulating tissue.

Electro-samptest devices of this type permit electrosamptest operations of the filled blackfor (decire resection, e.g. of blackfor tamors and the prostate glands) 2

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using endoscopes, particularly resectoscopes and cysto-

The high degree of development is the endoscope field has resulted in operations in the bladder and on the prostate glands using these instruments and by means of 15 electro-surgery have because the most commonly used

In known devices of this type, figh frequency alter-sting current is fed via an earthed sentral electrode on the one-hand and via a sporting ball or cucting loop well invalued relative to the outer shaft of the endoscope on the other to the operating area for congulation purposes in the case of hemorrhages. Due to the relatively small arms of the cutting loop conquent to the area of the beautral electrode applied extensity to the parient's body a very high current density occurs in the area of the cutting loop which results in heat generation in the times flaked with the turning of the times cells through Enter Instant with the braviling of the Insue cold through sterm generation and conceptually a separation of the insues. Pure the desired corting or congesting effects, the accessary power values of the high frequency car-rent applied way between 120 and 150 W. At the leash one the high frequency generator to the cutting electricide have to be passed through the matthic, conducting, the features between the high I developed accession, the features between the high I developed the control of contro

carrying lead and the remaining metal parts of the endo-scope insulated therefrom are so small that experimences of counterable size exist between these to of considerable size casts between these mean pure. This, to a certain extent, the endoscope forms a capaci-tic wis which pure of the applied capacity flows away as leakage current onto the flance engaging with the metal endoscope shell. A further, will larger portion of the applied capacity flows from the cutting loop via the washing water directly to the notal parts of the endo-scope shaft located in the washing water flow and from 55 scope shall beauted in the washing water frow and from 35 there to the energing ideas. Thus, reconstrabble electrical coefficion in the arteful classe capping with the contraction in the first contraction of the contractio

the entire leakage current is led off to the points where the operator is in contact with the endoscope leading to burns to the operator's face or to the eye in contact with the metal recutcheous of the transparent optics.

Neutral electrode isolation from earth potential casnot prevent the passage of the leakage currents to the operator. As the sentral electrode acts as an oppos pole to the cutting or congulation electrode between the patient and the nurthed operating table, it is capacitively connected to earth potential. Therefore, the cutting loop and the leskage current flown therefrom together with its voltage are carthed. Since, in any case, the operator largely carries the earth potential, the passag of the leakage current to the operator cannot be avoided by the measures in question

BRIEF SUMMARY OF THE INVENTION

The problem of the invention is therefore to provide an electro-surgical device of the type indicated herea-before where indexired burns to the prefers and the operator are effectively avoided.

According to the invention, this problem is salved in that the large-area neutral electrode is arranged in the vicinity of the treatment electrode and is connected with the other pole of the high frequency generator by mouse of an insulated cable which can also be passed through the endoscope. In this way, potential compensation takes place in a spatially very surrowly defined ross. Both the treatment electrode, preferably con-structed as a caming loop and the sentral electrode carry no potential to earth. Leskage current does not flow to the endoscope shaft either from the high fre-quency lead to the treatment electrods or from the lead to the neutral electrode. Due to the existing capaci-tance, leakage cur rents only flow between the leaks, but there do not have say external effects.

However, due to the small-eres construction of the treatment electrode, a high current density is obtained there, which is adoptate for those separation or congu-lation, whereas the neutral electrode arranged in the amediate vicinity has such a large area that undexired heating is avoided there

According to a preferred embodiment, the two food leads comprise a cuspial cable, whose shield forms one conductor and is insulated relative to the endoscope. Thus, the two high frequency leads for the treatment and neutral electrode form a structural unit, which whilst taking up only a trail amount of space, can be simply passed through the endoscope together with the optical and washing postions.

In general, the trestment electrode should be in loop form so that the operator's field of vision is uninter-

According to a further embodiment, the centre con-ductor of the constal cable at the front projects above the shield and at this point passes into the treatment electrode. It is thereby particularly advantageous if the shield is constructed as a rigid sloeve and in such a way that the treatment electrode can be moved backwards and forwards relative to the endoscope via the countril cable. Thus, in this embodiment, the contial cable at the sume time forms the support and operating scember for the treatment electrode.

The relatively large neutral electrode is advanta-grounly directly fited to the couriel cable shield. In this way the neutral electrode can be mounted reliably and immovebly in an inexpensive and uncomplicated man-

Advantageously, the neutral electrode is con as an elongated metal sheet slightly curved about the endoscope shaft and extending on either side over the

consist cable. According to a further advantageous embodiment, 5 the endoscope has a plastic extension extending over a small portion only of its periphery, whereby the treatsensi electrode can be moved between the manufacture of the patient of the patient beneath the advantage and extension. This plante extension has a complete by the advantage and the complete by the connected in passified by the advantage and the transmitter which with the rily guided and tiene which is not to be treated can be kept away from the treatment electrode. According to the investion, this extension can be used so that the large-area neutral electrode is fixed in jumplated manner relative to the endoscope on the inside of the extension. 13 The neutral electrode is then preferably connected with the high frequency generator by an insulated cable secured in the radoscope. Is this case, only the other secured in the endoscope. Is this case, only the other conductor with its insulation and presented electrode is axially moveble.

According to a particularly preferred embodiment the enamid cable has a bifurcation just before the body side end of the endoscope and the two inner condu eminating from the bifurcation are interloop forming the treatment electrode. This construction is particularly stable due to the symmetry conditions as parameter some one to the symmetry common resulting from the bifurcation, whereby at the same time the operator still has good whibility through the cutting loop forming the treatment electrode.

If the treatment electrode is used for congulation purposes, a congulation specing ball is fetted to the

The coasial cable is advantageously surrounded by I be county cross a soveragement watersounce or an instituting lead so as to prevent any connection of the endoscope mend with the high frequency voltage. Pref-erably, the insulating storve of the bifurcated control cable it also bifurcated, but it extends only to just in

front of the neutral electrode.

In the case of the hifurested countied cable, the neutral electrode is preferably an elongated metal short, bent slightly around the endoscope shaft and extending from one branch of the bifurcation to the other. The sheet one manner of the neutration to use cured. The finer can have projections at the four consens which are placed around the shields. Depending on the degree of a placing around and also clamping, my desired fixing of the mentral electrode to the contail cubic can be ob-

The current density in the men of the operating reis advantageously influenced if the neutral electrode so terminates at a distance from the end of the shield.

According to a further advantageous embodime According to a Infere navasatignous embodiment, the neutral electrode comprises two purial electrodes extending in the direction of the loop away from the two styn of the bifurcation. Preferably, the partial elec-trode do not extend quite as far from the shields as the loop. At the front and rev ends the sheets preferably

have rounded portions.

As a result of the slide-like construction, the operator can reliably guide the endoscope by placing the slide-like short projections on the times to then be removed. As it known, the endoscope is operated in such a way that the cutting loop is moved forwards relative to the endoscope, made live and then slowly setracted, whereby the tissue is removed by the heating on the 65

As stated hereinbefore, the treatment electrode and pentral electrode are appropriately so shaped and posi-

tioned that the illumination, vision and washing operations are not impaired by the endoscope.

Advantageously, the leads are inductively connected to the high frequency generator, whereby advantageously, a capacitor for filtering out low frequency waltage partions is preferably provided in one lead. This, in advantageous manner avoids faradic effects in

inductor of the latter forms an oscillating circuit which is traced in such a way that the attenuation in the curil lating circuit formed by the leads, treatment electrock and acutral electrode is minimal.

BRIEF DESCRIPTION OF THE DRAWINGS

Other sed further objects of the present invention will be apparent from the following description are: was to apparent took the tottowing description and claims and are illustrated in the accompanying drawings which, by way of illustration show preferred embodi-scents of the present invention and the principles thereof and what are now considered to be the best modes contemplated for applying these principles.

Other embodiments of the invention embodying the a embodying the Other encountent principles may be used and attrac-tural changes may be made if desired by those shifled in the set without departing from the invention and the scope of the appended claims.

In the drawings show:

PIG. 1 a schematic, greatly enlarged perspective view of the front end of an endoscope equipped with the electro-surgical device according to the invention PIG. 2 a perspective view of a further embodiment of

the electro-surgical device according to the invention, without the endoscope surrounding the sense.

FIG. 3 a further embodiment of the electro-surgical

device according to the invention, once again with surrounding endoscope.
FIG. 4 a schematic circuit diagram of the electro-pay-

gical device according to the invention with a parifor-larly sainable high frequency generator. FIGS. 5 and 6 perspective views of two further no-vantageous embodiments

Vantageous emponents
FIGS. 7 and 8 a perspective view and as axial section
of a further advantageous embodiment.
FIG. 9 a subematic circuit diagram of an additional. device for the device according to the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

According to FIG. 1, an endoscope 13 is axial tra-versed in tonversional manner by a fibre optical system 17, which is speed relative to the sides of the endoscope 13, in each a way that weshing fiquid can pass through there (arrow 29) and there still remains space for the said insertion of an electro-surgical prestment

According to the invention, this electro-surgical treatment device comprises a coaxiel cable 19 with (ign) metallic shield 14 and as inner conductor 16 axisliy erted together with the fibre optical system 17. Inside the metallic shaft of the endoscope 13, the sheed 24 is covered in not shown manner with an insulating steeps 12, shown in the case of the constructions of FIGS, 2

and a.

At the frost, inner cooductor 16 projects somewhat from the course cable 19 and passes into the treatment electrode 12, which in general comprises a loop ensuing free visibility for the operator via the fibre optical systems 17.

The opposite electrode for the cutting electrode 12 is formed by a neutral electrode 11 fixed in electrically conductive manner to shield 14 and which is curved concurred matter to stock to and water in curves somewhat about the endorsop shaft, having a rectangular, elongated form shown in FIG. 1. Inner conductor 16 and shield 14 are connected, as shown in FIG. 4 to the two poles of a high frequency generator 15 which are pot at earth potential.

At the front and of the metal shaft of the endosco 13 is fixed a plastic extension 18, which is numbed and extend in the manter shown in FIG. I, so as sot to impair insertion, for example into the methra. As the plastic extension 18 is an insulating body, the large-area neutral electrode 11' can also be fitted to the inside. It is this appropriately connected with the associated pole of the high frequency generator via a separate issulated conductor 16' in the endoscope, inside of via the shield

As a result of the construction according to the in-vention, a high frequency field is only furned between shield 14 and inner conductor 16, as well as between pentral electrode 11 and treatment electrode 12, as in en schematically in FIG. 4 by capacitors C. and C. Due to the current conduction through the tiese fit and tissue itself, a true resistor R is also conceivable parallel to the expecitor between neutral electrode 11 and treatment electrode 12.

and treatment electrical II.

The 1994by to connect scattal electrode II and the
treatment electrode II takes place by the inductive
coupling of a high frequency voltage by means of a
transformer II, whose input voltage by means of a
transformer II, whose input voltage in regulatible by a
variable tap 38. Due to the inductive coupling, the conput fines 18 and 16 are galvanically isolated from earth

potential.

A capacitor 26 connected in lead 16 is used for filtering out the low frequency current and therefore avoid for first effects of the state system of the parient. A capacitor 11 connected in parallel to the output winding 17 of transformer 25 and behind capacitor 26 forms with the output winding an oscillating circuit transf is such a way that the attenuation in the oscillating circuit forused from C_L C and R as well as the inductors of 45 lines 14 16 is minimal.

As a result of the construction according to the in-vention, the leakage consents only flow between lines 14, 16 and therefore do not reach the metal shaft of secops 13. Thus, larger current describes such as are smary for tissue separation or compulation only necessary for tissue separation or congulation only occur outside the endousope in the operating seas. Therefore, the dauger of heating outside the desired near, in well as beens to the operator is reliably sevoled. PRG. I alsows a particularly selventageous embodi-

ment of the electro-surgical device according to the ation is which both the inner conductor 16 and the shield 14 have a bifurcation 24. I, the same way, the insulating sleave draws over the shield 14 is bifurcated. The production of such a bifurcation is advantageously obtained by a welded joint at point 32 indicated by a

As a result of the bifurcation shown in PIG- 2, a cutting loop 12 can be arranged in the shown manner between the two lines conductors 16 contents og at the 45 end. If the treatment electrode it to be used for coage tion, a congulation sparking ball If can be provided on loop 12.

The construction of FIG. 2 is particularly well suited to the arrangement of a relatively large-area neutral electrode 11 which appropriately extends between the shields 14 of the two branches of the bifurcation 20, being slightly beat about the endoscope that. At the end, the neutral electrode 11 has projections 23 which are securely placed around the shields 14 for securing neutral electrodes 11 and for supplying the same with voltage. The metal sheeting forming the neutral electrode simultaneously constructionally remforces the trade insultaneously constructionary remotions are bifurcation 20, so that the guidance of the treatment cheenagle 12 by the operator is aided. As is known, the axial provement of the electro-surgical device in the direction of the double arrow future place by operating a pistol-like handle on endoscope 13, not shown in the

A further advantageous embodiment is abown in PIG. 3 where the neutral electrode is broken up into PMO. 5 where the Reason contribute in moura up may two partial electrodes II.a. 11.b. which is the repre-sented manner are soldered or welded to the shields 14 in such a way that the partial electroder extend in the seeme direction as catting loop 12. Rounded portions 24 are provided at both code. The partial electrodes 11a, 11b applied to the shields 14 in this way thur addition-

The sphere to the theckst M in this way thus additionally form slike-like support, by means of which the electron surgical device; can be placed on the times to be removed. This nost only course a reliable guidance of the device but also causes that the lisens is removed to the product resize to the product FIG. 5 shows a further advantageous unbeciment,

whereby only the fruit part of the electro-surfical de-vice without the endoscope is shown. In this embodi-seest, two issubsted cables with inner conductors 14, 16 are pened from high frequency generator 15 through the endoscope. At the front end are successively arranged the cutting loop 12 and the neutral electrode 15 constructed as a steel band. The cutting loop 12 is electrically conductively connected with the int tor 16, but at the other end is only fixed to the invulstices tor it, not at the other end a only lined to the invalution surrounding the conductor it. Convenely, the steel hand it, whose always is similar to the outing loop 12, is connected in electrically conductive and mechanically scame assumer with the inner conductor it, whilst the

accuse manner wint the most constraint A, whilst the opposite and is acchemically secured to the insulation of the issuer conductor 16. Since, according to the inven-tion, the steed based 11 has the same radius at the wire loop, on extracting the loop 12 in the detection of arrow P, the based does not form an obstacle to the tissue portions removed by the loop. The neutral electrode 11 in the form of the steel band rests on the tipme in large-

nee room or use meet cased rests on the turne in larged-area form, so that good electrical contact is mastered. FIG. 6 shows an embodiment which is motivantially the name as FIG. 5, whereby however, a bifurcated coacial cubbe, similar to FIGS. 2 and 3 is seed. The wire loop 12 is once again fixed to the inner conductors 16, whilst the neutral conductor 11 is band form is mechanicelly accured to extensi ions 16' electrically connected

is the embodiment according to PIGS. 7 and 8, the frost portion of endoscope 13 itself or a cosmis) connection attached thereto at the from is constructed as the neutral electrode 11. To this and, the front portion is electrically inculated relative to the rear portion or the front-fitted connection from endoscope 13 by an intermediately inserted insulating ring 36. The cutting loop 12 can at the front be persect out of the neutral electrode It in one of the above-described unanters. In the present combodiment, two leads 16 pass oftewards from the cybiodrical neutral electrode II, which at 20 are consisted to form a single cable, leading to the tear and of ordocompe II. The neutral electrode II is connected wis a 5 further insulated cable 14 to the high frequency generator 13 not above in FIGS. I and \$

It is also importuse in the case of the condediment of FIGGS. Fand if the the case is post-created a reliably up to as involating ring 13 mounted at the front on the located electrode II and can be remarted electrode in the fine to the results electrode in the fine to the results electrode in the front edge of the insultaging ring. 32 serves at a support for the cutting loop 1X, 30 there the suscribed in the substitution of the continuation of the cutting loop 1X, 30 then the suscerial is reliably removed therefront. Therefore, as shown the insu-13

lating ring 35 must be rounded at the front.

Preferably, the insulating rangs 35, 36 have axial attachments 37 with a reduced external diameter, by means of which a suschanically secure fixing to the

means of which a nucleasically scoure fixing to the modal their is curred a. If I have an admit a device 21, by means of which a convenience light fragment, respiral apparents which a convenience light fragment, respiral apparents for the preparent of the inventor. The sublitation of the first properties of the inventor. The sublitation of their department of the inventor of the inventor of the properties of the respirate of the properties of the respirate of the respirate of the properties of the p

Vis a expansion 26, the output winding of transformer
25 is applied to the two output terminals of the stddtional device XI, where the lacht 34, 16 can be applied. 31
In this way the high frequency apparents 15 acquires
an output with fluctuating potential, as is necessary for
the consecution of the electro surgical device accumuling

to the favestion.

The invention is not limited to the embodiments doscribed and represented hereinbeduce and various anodilications can be made thereto without passing beyond the acope of the invention.

the through a control for the
2. The combination of chim 1, wherein said insulated cubic means and said means for connecting said neutral electrode to said other pole comprise coastal cable is means with shielding means forming one of taid connecting means and being insulated relative to said endopole.

 The combination according to claim 2, wherein and shielding means is constructed as a rigid sleeve in which said freatment electrode is adapted to be moved back and forth relative to said endoscope body through said considerable means.

4. The combination seconding to claim 2, wherein said neutral electrode is fixed directly to said shielding second of said costal cable means

5. The combination according to claim 4, wherein the scutral electrode is constructed as an elongated metal short alightly bent within said endoscope body and extending over said constil cable menu.

extending over said coaxial cable means.

6. The combination according to claim 2, comprising an involuting slower surrounding said coasial cable series.

 The combination according to claim 6, wherein said insulating alcove is bifurcated and extends approxisately to and neutral electrode.

8. The combination according to claim 7, wherein said neutral electrode in an elongated neutral sheet slightly bent within said endoscope body and emending from one branch of said bifurcated insulating slower to the other.

 The combination according to chim 8, wherein said sheet has projections at its four corners, two each of which are placed around the respective branches of said bifurcated sleeve.

 The combination according to claim I, wherein said neutral electrode terminates at a distance from said staiciting means.

13. The combination according to claim 1, wherein said neutral electrode is accured to and invalated from said endoscope body on the inside of said insulating

projection.

12 The combination according to claim I, wherein said means for consocing said means described to said high-frequency generator is an insulated conductor account in said endoscope body.

13 The combination according to claim 2, wherein said counts calls access has a bifurcation at that end of

13. The continuities according to claim 2, wherein said contail cable seems has a bifurcation at that end of the endocrope body adjacest said projection, two inner conductors eminating from said bifurcation, and a loop interconnecting said two lance conductors and forming said treatment electrode.

14. The combination according to class I, wherein a congulation sparking ball is fitted to said treatment electrode.

25. The combination according to claim 1, comprising ing a high-frequency generator, and whereis said cable wears and said consecting means are inductively conpled to said high-frequency generator.

86. The combination according to claim 15, wherein a capacitor is connected in one of said cable means and said connecting means for filtering out low-frequency voltage.

13. The constitution seconding to claim X, wherether said generator comprises a transformer with an unique said generator comprise at transformer with an index winding lawring as inductor, as capacitor being consecuted parallel to asid output winding and forming consistency circuit with a said inductor, said circuit being consistency circuit with said inductor, and circuit being consistency circuit with said inductor, and circuit being consistency circuit with said inductor and said circuit being circuit as said circuit circuit and capacital connecting means, treatment destrote in said-said.

encurous and neutral electrone is manual.

18. The combination according to claim 15, comprising means for potential isolation connected between said high-frequency generator and said cable means with aid consecting means respectively.

19. The combination according to claim 18, wherein said potential isolation means comprises a transformer, a expaction connected parallel to said transformer, said 5

high-frequency generator having an output circuit, said

transformer and said output circuit being tuned in reso-

nance.
20. The combination according to claim 19, comprising an inductive transformer connected to said transformer, and cable means and said connecting means
being connected to said inductive transformer.

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_ DC	5,370,675	12/06/94	Edwards et al.	607	101	
DD	5,417,687	05/23/95	Nardella et al.	606	32	•
DE	5,423,882	06/13/95	Jackman et al.	607	122	
DF	4,326,529	04/27/82	Doss	128.	303.1	
bG	4,381,007	04/26/83	Does	128	303.1	
DH	4,476,862	10/16/84	Pao	128	303.17	
bī	4,532,924	08/06/95	Auth et al.	128	303.17	
pJ	4,567,890	02/04/86	Ohta et al.	128	363.13	
DK	4,593,691	86/10/86	Lindstrom et al.	128	242.14	
DL	4,931,047	06/05/90	Broadwin et al.	604	22	
DH	4,936,301	06/26/90	Rexroth et al.	606	45	
- bp	4,943,290	07/24/90	Rewroth et al.	606	45	
100	4,979,948	12/25/90	Geddes et al.	606	33	
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EK.	5,217,455	06/08/93	Tan	696	9	1
EL	5,423,803 .	06/13/95	Tankovich .	606 .	9	
EM	5,102,410	04/07/92	Dressel :	606	15	
EN	5,282,797	02/01/94	Chess	606	9	1
EQ ·	5,290,273	03/01/94	Tan	606	1 9	
EP	5,304,170	04/19/94	Green	606	9	
EQ	5,312,395	05/17/94	Tan et al.	606	9 .	
ER	5,336,217	08/09/94	Buys et al.	606	9.	·
ES.	5,445,634	08/29/95	Keller	506	9	
ET	5,370,642	12/06/94	Keller	606	9	
EU	5,261,410	11/16/93	Alfano et al.	128	664	
EV	5,380,316	01/10/95	Aita et al.	606	7	
EH	4,658,817	04/21/87	Hardy	128	303	
EX	5,389,096	02/14/95	Aita et al.	606	15	
EA	4,976,711	12/11/90	Parins et al.	606	48	
EZ	5,383,917	01/24/95	Demai et al.	607	702	
		POREI	GN PATRIT DOCUMENTS			
	Document No.	Date	Country	C1403	Sub-	Translation (yes/uo)
L-FA	WO 90/07303	07/12/90	NIBO .	A618	17/39	
FB	WO 93/20747	10/28/93	WIPO .	AG1N	1/06	1
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₹~OP	5,009,656	04/23/91	Reimels .	606	48	
1 ₽0	5,108,391	04/28/92	Flächenecker et al.	606	36	1
DR	5,195,959	03/23/93	Smith	604	34	1
DS	5,277,201	01/11/94	Stern	607	98	
DT	5,290,282	03/01/94	Casscells	606	29	
Da	5,569,242	10/29/96	Lax et al.	606	12	:
DV	4,228,800	10/21/60	Degler, Jr. et al.	128	303.	
DK	4,998,933 .	03/12/91	Eggers et al.	506	-43	· · · · ·
DX	5,281,216	01/25/94	Klicek	606	12	
DY	4,943,290	07/24/90	Rexroth et al.	606	45	
DZ.	4,936,301	06/26/90	Rexroth et al.	606	45	
PA	4,593,691	05/10/86	Lindstrom et al.	128	303	
EB	4,202,337	05/13/80	Hren et al.	128 .	103	
EC	5,195,959	03/23/93	Smith .	604	34	
- 50	4,674,499	06/23/87	Pao	128	303	
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EG	HO 92/21276	12/10/92	PCT· ··	A61B	5/04	
EH	WO 93/13816	07/22/93	PCT	A61B	17/36	
EI	NO 94/14383	07/97/94	PCT	A618	17/36	
EJ	EP 515 867	12/02/92	Europe	A618	17/36	
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-	F EL	5,423,803	06/13/95	Tankovich	606	. 9	
-	EM	5,102,410	04/07/92	Dresacl	606	15	1
	EN	5, 282, 797	02/01/94	Chess	606	9	
	EO	5,290,273	03/01/94	Tan	506	9	
ļ	EP	5,304,170	04/19/94	Green	606	9	
_	. EQ	S, 312, 395	05/17/94	Tan et al.	506	9	1
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_	ES	5,445,634	08/29/95	Keller	606	.9	1
	ET	5,370,642	12/06/94	Keller .	606	9	
	EU	5,261,410	11/16/93	Alfano et al.	128	664	
_	_ EV	5,380,316	01/10/95	Aita et al.	eòe.	7	
	EW	4,658,817	04/21/87	Bardy	128	303	
	_ EX	5,389,096	02/14/95	Aits et al.	606	15	
	EY	4,976,711	12/11/90	Parins et al.	606	48	
_	_EZ	5,303,917	01/24/95	Desai et al.	607	702	
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L	- PA	WO 90/07303	07/12/90	WIPO .	A61B	17/39	
	-PB	NO 93/20747	10/28/93	WIPO	A61N	1/06	
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LIST OF P	1449 (Modified) PATENTS AND PUBL TS INFORMATION I		Attorney Docket No. A-2-2	Serial herewi	Na.: th	1.00
STATEMENT (Use severa	l sheets if secossar	yl .		1		
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Byrc .	4,765,331	08/23/88	Petruzzi et al.	128	303	
FD	5,057,105	10/15/91	Malone et al.	606	. 28	1
FE	4,967,765 1	11/6/90	Turner et al	128 .	785	
FF	4,532,924	08/06/85	Auth et al.	128	303	
FG .	5,454,809	10/03/95	Janesen	606	41	
PH	5,178,620	01/12/93	Eggers et al.	606	41	:
FI	5,366,443	11/22/94	Eggers et al.	606	114	
FJ	5,419,767	05/30/95	Eggers et al:	604	114	
FK	4,709,698	12/61/67	Johnston et al.	128	303	
FL	2,050,904	08/11/96	Trice	1	-	
FH	4,955,377	09/11/90	Lennox et al.	128	401	
EN	5,083,565	01/28/92	Parins	128	642	
FO	4,202,337	05/13/80	Hren et al.	128	303.14	
FP.	4,228,800	10/21/80	Degler, Jr. et al.	128	303.14	
FQ.	4,593,691	06/10/86	Lindstrom et al.	126	303.14	
FR	4,936,301	86/26/90	Rexroth et al.	606	45	
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		Applicant: PHILIP E.	EGGERS e	t al.	
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Reference Designati	ion v.s	. PATENT DOCUMENTS			
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SK 78 1,943.2	90 07/24/90	Rexroth et al.	606	45	1
FT. 4,976,7	11 12/11/90	Parins et al.	606 .	. 48	
FU 4,998,9	33 ' 03/12/91 .	Eggers et al.	506	41	1
FV 5,083,5	65 02/28/92	Parina	128	642	
FW 4,043,3	42 08/23/77	Morrison, Jr.	606	48	
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UNITED STAT. DEPARTMENT OF COMMERCE
Patent and Trademark Office
Adams: COMMERCE OF PATENTS AND TRADEMARKS
WALKINGTON, B.C. 20231

APPLICATION NO.	FUNG BATE	FIRST HAVED INVENTOR	ATTO	MINEY DOCKET NO.
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Office Action Summary	Examiner Lao S. Cohi		Group Art Unit 3739	
XI Responsive to communication(s) filed on May 25, 200	ю			
▼ This action is FINAL.				
[3] Since this application is in condition for allowance exc in accordance with the practice under Ex parte flueyle	opt for formal matters , 1935 C.D. 11; 453	presecution O.G. 213.	n 4s to the me	rits is closed
A shortened statutory period for response to this action is longer, from the mailing date of this continuousation. Fappication to become aboutoned, [35 U.S.C. § 133]. E 37 CFR 1.136(a).	ailure to respond with	in the period	for response	will cause the
Disposition of Claims				
20 Claim(s) 80, 81, and 83-158		io/are	panding in the	application.
Of the above, deimits) 103-137		is/are w	ithdrawn from	consideration.
20 Claimts) 60, 81, 83-85, 53-101, and 138-155			/are allowed.	
☑ Claimial 30-92, 102, and 156-158			Jare rejected.	
Caim(s)			Vare objected t	n.
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See the attached Models of Draftsperson's Patent D The distribution of the desire of t	is per is is per is is per is is is per is is per is is per is is in it is in	eminer. proved (\$ 119(a)-(cuments ban reau (PCT F	e bean Sule 17.2(a)).	
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SEE OFFICE ACTION	ON THE FOLLOWING	PAGES		

Art Unit: 1739

Claims 103-137 stand withdrawn from further consideration by the examiner, 17

CFR 1.142(b) as being drawn to a non-elected invention. Election was made without traverse in

Faper No. 6. These claims should be cancelled.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims pericularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 90-92, 102, and 156-158 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 90 - "the active return electrode" in lines 1-2 and "the active electrode" in line 3 lack antecedent basis. Claim 102 - "the active electrode" lacks antecedent basis. Claim 156 - "the electrode terminal" lacks antecedent basis. Claims 157 and 158 - "the delivering step" lacks antecedent basis. Claim 159 -the probe and its recited elements lack antecedent basis.

Claims 80, 81, 83-89, 93-101, and 138-155 are allowed. -

Claims 90-92, 102, and 156-158 would be allowable if rewritten or amended to overcome the rejection(s) under 15 U.S.C. 112, 2 maragraph, set forth in this Office action.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the muiting date of this final action and the advisory action is not mailed until after the end of the TIREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the manutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Lee S. Cohen at telephone number (703) 308-2998.

Lee Cohen Primary Examin



UNITED STAT. SEPARTMENT OF COMMERCE Patent and Trademark Office

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

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APPLICATION NO.

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THE APPLICATION EDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERTS IS CLOSED.

THE ISSUE FEE MUST BE PAID WIDEN THREE MONTHS FROM THE MAKING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ADARDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

- I. Fleview the SMALE ENTITY status shown above If the SMALL ENTITY is shown as YES, verily your come a SMALL ENTITY states.
 - A. If the station is changed, pay twice the amount of the FEE DUE shown above and sollly the Patent and Trackmark Office of the change is status, or
- . B. If the status is the series pay the FEE DUE shown -

If the SMALL ENTRY is shown as NO:

A. Pay FEE DUE shown above, or

- B. File worlfied statement of Smell Entity Status before, or widt; payment of 1/2 the FEE DUE shows above.
- II. Part B-lanue Fee Transmittel should be completed and morned to the Palent and Tradement Office (PTO) with your SSUE FEE. Even if his SSUE FEE has sheety been paid by charge to depose account. Print if its sum fee interantial should be completed and namend. If you are charging he ISSUE FEE to your depose account, eachin 'lef' of Peri B-lease Fee 'immendial should be completed and namend and on some copy of the form should be submitted.
- III. All constructions regarding this application must give application number and batch number.

 Please direct all communications prior to lansence to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility potents issuing on applications filed on or after Dec. 12, 1900 may require payment of maintenance feed. It is patentee's responsibility to ensure their payment of maintenance.

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Re-Transmittal Identical Documents With Accompanying Check

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No.

: 5.697.536

Prior Examiner: Manuel Mendez

Date of Issue

Name of Patentee Title of Invention : December 16, 1997

: Eggers et al.

: SYSTEM AND METHOD FOR ELECTROSURGICAL CUTTING AND ABLATION

REEXAMINATION REQUEST

[] Commissioner of Patents and Trademarks

C Box REEXAM * Washington, D.C. 20231

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WITH THE STREET STREET, BOOKSON SOURCE on FC:147 Dear Sir:

CERTIFICATE THUER 37 CFR 1.8: The Ond

CENTIFICATE UNDER 37 CFR 1.8: 100 UNDERSAMENT A certifies that this paper or papers, as desc herein below, are being deposited with the U States Fostal Service, on the date shown below sufficient postage as first class sail in an env ressed to the: Commissioner of Patents and Trademarks

BOX REEXAH

Mashington, B.C. 20231 On this 23rd day of December, 1999.

The attached was inadvertently dispatched this day without the accompanying check, now attached.

It is respectfully requested that the check should be associated with one set of documents, only, and that one only REQUEST FOR REEXAMINATION should be opened. .

Respectfully submitted.

William C. Fuess Req. No. 30,054

UNITED STATES PATENT AND TRADEMARK OFFICE

Patent to Date of

5,697,536

Prior Examiner: Manuel Mendez

: December 16, 1997

Name of Patentee

: Eggers et al.

Title of Invention

: SYSTEM AND METHOD FOR ELECTROSURGICAL

CUTTING AND ABLATION

REEXAMINATION REQUEST

Commissioner of Patents and Trademarks BOX REEXAM Washington, D.C. 20231

CERTIFICATE UNDER 37 CFR 1.8: The Undersigned hereby CERTIFICATE UNDER 37 CER 1.07 THE UNDERSTANDED OF CERTIFIES that this paper or, papers, as described herein below, are being deposited with the United States Postal Service, on the date shown below with sufficient postage as first class shall in an envelope addressed to the: Commissioner of Patencs and Trademarks

HAX33R KOS

this 23rd

Washington, D.C. 20231 23rd day of December, 1999.

Dear Sir:

Reexamination is requested pursuant to 35 U.S.C. \$\$302-307 and 37 CFR \$1.510 of the above-identified patent. The following items are enclosed.

- 1. Prior art relied upon and a Form PTO-1449 (37 CFR \$1.510 (b) (3)).
- A substantial new question of patentability raised by the above prior art and the pertinency of the cited prior art of the claims for which reexamination is requested is set forth in the attached STATEMENT OF NEW QUESTION OF PATENTABILITY (37 CFR \$§1.510 (b)(1) and (2)).
- A cut-up copy of the original patent showing single columns of the patent reproduced on one side of a separate paper (37 CFR \$1.510 (b) (4)).
- The signature below certified that: .

A copy of this request and all accompanying papers has been served on the patent owner at the address provided for in 37 CFR \$1.33(c) by depositing the documents in an istant. Tombusco Googat. Tombasco envelope bearing first class postage in an official U.S. Postal Service repository at the date set forth below addressed as follows:

Name Hira V. Thapliyal
Arthrocare Corporation

Address 595 North Pastoria Avenue

Sunnyvale, California 94086

 A check in the amount of \$2,520.00 is attached. (37 CFR \$\$1.20(c) and 1.510(a)).

Please charge any deficiency to Deposit Account

Any refund should be made by check.

The name and address of the person making this request is:

Name William C. Fuess Reg. No. 30,054

Address FUESS & DAVIDENAS .

10951 Sorrento Valley Road

Suite II-G
San Diego, CA 92121-1613

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Respectfully submitted,

Dated: 12/27/99

December 23, 1999

William C. Fuess Reg. No. 30,054

34

STATEMENT OF NEW QUESTION OF PATENTABILITY

I. Patent and Claims for which Reexamination is Requested

Reexamination under 35 U.S.C. \$\$302-307 and 37 CFR \$1.510 is requested of U.S. Patent No. 5,697,536 which issued on December 16, 1997 to Eggers et al., and is assigned to Arthrocare Corporation (hereinafter "the Eggers '536 Patent"). Reexamination is requested of claims 1-3, 14, 16, 22, 27, 30, 33, 38, 41-48, 55, 57, 60 6 63, in view of U.S. Patent No. 4,116,198 to Roos (hereinafter "the Roos '198 Patent"). It is noted that the Roos '198 Patent was not before the Examiner during the prosecution of the Eggers '536 Patent.

II. Statement of Substantial New Question of Patentability

A. Overview

The Eggers '536 Patent is directed to devices employing high frequency voltage to cut and ablate tissue. (Eggers '536 1:19-21).

The Eggers '536 Patent discloses and claims electrosurgical devices that are designed and intended to be used in conductive fluids such as isotonic saline. The electrosurgical device generally includes a current supplying radio frequency generator; an active electrode, or an electrode terminal, mounted near the tip of a surgical probe; a return electrode positioned rearward of and in a spaced apart condition from said active electrode; an insulator separating the active and return electrodes; and, an

electrically conducting fluid path in electrical contact with the active and return electrodes.

B. <u>Subject Matter of Claims 1-3, 14, 16, 22, 27, 30, 33, 39, 41~48, 55, 57, 60 & 63</u>

The independent claims are claims 1, 45 and 63.

Each of the independent claims is directed to an "electrosurgical system." The statement of intended purpose in the preamble of claim 1 is one of "use," namely "for use with a high frequency power supply and an electrically conducting fluid supply" (Id., 15:6-7), whereas the statement of intended purpose in both claims 45 and 63 include the following functional language: "for applying electrical energy to a target site on a structure within or on a patient's body" (Id., 18:13-15, 20:8-

Reexam requestor respectfully asserts that the preamble language of claims 1, 45 and 63 is not limiting. The Court of Customs and Patent Appeals, predeceasor to the Court of Appeals for the Federal Circuit, in <u>Repos v. Robie</u>, 187 F.2d 150, 88 USEO 478 (CCPA 1951) reviewed 37 of its own prior decisions, 27 of which held that the preamble was not a limitation. The CCPA

distilled the following synthesis from the cases:

10)1. With respect to the preambles, it is further noted that

[The preamble has been denied the effect of a limitation where the claim or count was drawn to a structure and the portion of the claim following the preamble was a self-contained description of the structure and the notion of the structure on the depending for completeness upon the introductory clause; or where the claim or count was drawn to a product and the introductory clause merely rected a property inherent in the old composition defined by the remaining part of the claim. In those cases, the claim or count apart from the introductory clause completely defined the subject matter, and the preamble merely stated a purpose or intended use of that subject matter.

(Id. at 152).

The CAFC provide a noteworthy analysis in <u>C.R. Bard Inc. v. M3 Systems</u> Inc. 48 USF0 1225, 1230 (red.CLr. 1998), one directly applicable to claim \(\lambda\) of the Eggers 536 Patent, wherein the presemble of claim 21 of the Bard '056

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electrode is adapted for said purpose. The fluid delivery element defines a fluid path which is in electrical contact with the return electrode and the electrode terminal. The fluid path has an inlet adapted to be fluidly coupled to the fluid supply for directing fluid along the fluid path to generate a current flow path between the return electrode and electrode terminal (i.e., conductively link the passive and active electrodes using a conductive fluid).

The recited elements of the claim 45 "system" for applying

electrical energy include a high frequency power supply, an electrosurgical probe, a return electrode, and an electrically conducting fluid supply for directing fluid so as to generate a current flow path between the return electrode and the electrode terminal. In contradistinction to claim 1, claim 45 positively recites the power and fluid supplies in the body of the claim as opposed to in the preamble as noted hereinabove. Both the probe and the return electrode are as recited in claim 1, with the functional terms "for" and "adapted to" eliminated, as the power supply is positively recited in claim 45.

The first eleven (11) lines of claim 63 read verbatim as claim 45. Thereafter, claim 63, as claim 45, requires an electrically conducting fluid supply, however claim 63 further requires a fluid delivery element. The fluid delivery element defines a fluid path electrically coupled to the electrode terminal for directing electrically conductive fluid to a target

site and the electrode terminal.

Claims 2, 3, 14, 16, 22, 27, 30, 33, 38, and 41-44 of the Eggers '536 Patent. directly or indirectly depend from claim 1. Each will be taken up scriatim.

Claim 2 of the Eggers '536 Patent depends from claim 1, and requires that the passive or return electrode form a portion of the shaft of the probe.

Claim 3 of the Eggers '536 Patent depends from claim 2, and requires that the "electrosurgical system" further include an insulating member circumscribing the passive electrode, the passive electrode being spaced from the electrode terminal so to minimize direct contact between the passive electrode and a body structure when the electrode terminal is positioned for electrosurgery.

Claim 14 of the Eggers '536 Patent depends from claim 1, and requires that the electrode terminal comprise a single active electrode disposed near the distal end of the probe shaft.

Claim 16 of the Eggers '536 Patent depends from claim 1, and requires that the "electrosurgical system" further include a current limiting element for controlling current flow through the electrode terminal to inhibit power dissipation into the medium surrounding the target site.

Claim 22 of the Eggers '536 Patent depends from claim 16, and requires that the current limiting element be a passive current limiting element selected from the group consisting essentially of inductors, capacitors, resistors and combinations

Claim 27 of the Eggers '536 Patent depends from claim 1, and requires that the "electrosurgical system" further include means for controlling power to the electrode terminal based on the electrical impedance between the electrode terminal and the return electrode.

Claim 30 of the Eggers '536 Patent depends from claim 1, and requires that the electrode terminal and the return electrode he configured to affect the electrical break down of tissue in the immediate vicinity of the electrode terminal when high frequency voltage is applied between the electrode terminal and the return electrode in the presence of electrically conducting fluid.

Claim 33 of the Eggers `536 Patent depends from claim 1, and requires that the electrode terminal have a distal portion configured for generating high electric field intensities sufficient to cause molecular disintegration of a body structure at the target site.

. Claim 38 of the Eggers '536 Patent depends from claim 1, and requires that the electrode terminal be configured for the cutting of tissue.

Claim 41 of the Eggers '536 Patent depends from claim 1, and requires that the electrode terminal and the return-electrode be configured to affect the ablation of tissue adjacent the electrode terminal, upon the application of sufficient voltage

therebetween, such that a portion of such tissue is volumetrically removed.

Claim 42 of the Eggers '536 Patent depends from claim 1, and requires that the electrode terminal be disposed at the distal tip of the electrosurgical probe.

Claims 46-48, 55, 57, & 60 of the Eggers `536 Patent, directly or indirectly depend from claim 45. Each will be taken up seriatim.

Claim 43 of the Eggers '536 Patent depends from claim 42, and requires that the return electrode be disposed proximally of the electrode terminal on the electrosurgical probe.

Claim 44 of the Eggers '536 Patent depends from claim 1, and requires that the electrode terminal be flexible, be disposed at the distal tip of the probe, and be extendable relative thereto.

Claims 46 and 47 of the Eggers `536 Patent each depend from claim 45 and recite limitations identical to or similar to those of claims 2 & 3 respectively.

Claim 48 of the Eggers '536 Patent depends from claim 45, and requires that the return electrode be an inner tubular member defining an axial lumen within the return electrode, the axial lumen having an inlet in communication with the electrically conducting fluid supply and an outlet in fluid communication with the electrode terminal,

Claims 55, 57 and 60 of the Eggers '536 Patent each depend

from claim 45 and recite limitations identical to or similar to those of claims 42, 16 & 27 respectively.

C. Basis for Substantial New Question of Patentability

It is submitted that claims 1-3, 14, 16, 22, 27, 30, 33, 38, 41-48, 55, 57, 60 & 63 of the Eggers '536 Patent are anticipated by the Roos '198 Patent under 35 U.S.C. \$102(b), and should be rejected.

The Roos '198 Patent discloses a bipolar radio frequency electrosurgical probe for removing tissue. The device includes active and return electrodes at the distal end of a probe shaft (endoscope) coupled to a radio frequency generator by connectors at the proximal end. Inductors, capacitors and resistors are further disclosed by Roos for controlling the current flow through the active electrode, so as to inhibit power dissipation into the area surrounding the target site, and a variable tap is provided for controlling the power to the active electrode.

The active electrode projects from the distal end of the probe shaft to engage a target site, with the return electrode being adjacent thereto. The return electrode is spaced back from the active electrode and positioned on, within or integral to the probe shaft, such that the return electrode cannot contact tissue when the device is removing or otherwise treating tissue.

The Roos bipolar device is intended to be used in electrically conductive fluid, with the electrical current flowing between the active and return electrodes through the fluid. A fluid delivery element defines a fluid path for fluid flow from a fluid supply when the Roos device is used as a "system," as is contemplated. The electrically conductive fluid provides a low impedance path between the active and return electrodes.

An electrically insulating member substantially surrounds the proximal portion of the active electrode, insulating the proximal portion of the electrode from the electrically conductive fluid while housing and supporting the active electrode. The small loop construction of the active electrode, which is inherently flexible and is disclosed as being extendable relative to the distal tip of the probe, provides a high current density which is known to effect sought after tissue removal.

D. Application of Prior Art References to Claims
In accordance with the requirements set forth in 35 U.S.C.
\$302, the cited prior art is applied to claims 1-3, 14, 16, 22,
27, 30, 33, 38, 41-48, 55, 57, 60 & 63 of the Eggers '536 Patent
on an element by element basis as follows:

Claim/				
Element		 	12.11	
Claim 1/				
Element	• •			

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THE COURT	, 1200000

	Claim/		
	Element		
	A	1. An electrosurgical system for use with a high frequency power supply and an electrically conducting fluid supply, the system comprising:	Roos '198 shows a combination of elements, i.e., a system, (e.g., PIG. 4) for use with a high frequency power supply and an electrically conducting fluid supply as evidenced by the electrically conducting fluid (i.e., wash water) passage shown and disclosed by Roos' (e.g., FIG. 1, reference numeral 29 and 4:51-54).
1.444.7	B	an electrosurgical probe comprising a shaft having a proximal end and a distal end, an electrode terminal disposed near the distal end, and a connector near the proximal end of the shaft for electrically coupling the electrode terminal to the electrode terminal to the electrosurgical power supply;	moos 198 generally shows an electrosurgical probe (FIG. 1) comprising a shaft 13 having proximal and data1 ends. An electrode terminal 12 is disposed near the distal end of shaft 13, with connectors, as achematically shown in FIGS. 4-6 fs 9, near the proximal end of the shaft 13 for electrically coupling the electrode terminal 12 to the electrosurgical power supply 15.
	c	a return electrode adapted to be electrically coupled to the electrosurgical power supply; and	Roos '198 shows a return electrode 11 adapted to be electrically coupled to the electrosurgical power supply 15. specifically via rigid metallic shield 14 (FTG. 1).
4:3 747,500	D	a fluid delivery elements defining a fluid path in electrical contact with the return electrode and the electrode terminal, the fluid path baving an inlet adapted to be fluidly complet to the electrically conducting fluid supply for directing fluid supply for directing fluid along the fluid path to generate a current flow path between the return electricals and the electrode terminal.	soos '198 'show a fluid delivery clement [FIG. 1], sawely the annular apace bounded by the interior of thaft wall 13 and the exterior of the fiber optical system 17 (4:557), which defines fluid path 29 [FIG. 1], for fluid flow from a fluid supply, not shown but inherently present. The fluid path 29 is in clettriced 1 and the electrode 1 and the electrode 1 and the clettriced inherently has an inhet adapted to be fluidly coupled to a supply of fluid flow directing fluid along the fluid path 29, which by its nature will generate a current flow path between the return electrode 11 and the electrode terminal 12,

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	Claim/		
	Element		
	Claim 2/ Element		
	Α	 An electrosurgical system as in claim 1, wherein the return forms a portion of the shaft of the electrosurgical probe. 	return electrode 11 that forms a
	Claim 3/ Element		
4-42-27-24-44-42-43	Α .	3. An electrosurgical system as in claim 2, further including an insulating member circumscribing the return electrode,	insulating members 35 4.36 circumscribing return electrode
	B	the return electrode being sufficiently spaced from the electrode terminal to minimize direct contact between the return electrode and a body structure at the target. Site when the electrode terminal is positioned in close proximity or in partial contact with the body structure.	electrode terminal 12 is
2	Claim 14/ Element		
34.69.0		14. The electrosurgical system of claim 1 wherein the electrode terminal comprises a single active electrode disposed near the distal end of the shaft.	Roos '198 shows in FIGS. 1, 2, 3 & 7, a single active electrode 12 disposed near the distal end of shaft 13.
	Claim 16/ Element	•	
	Α.	16. The electrosurgical system of claim 1 further comprising a current limiting element for controlling current flow through the electrode terminal to inhibit towar dissipation into the medium surrounding the target site.	Roos '198 shows in FTG. 4, multiple current limiting elements (4.e., inductor 25, capacitors 26, 28 etc., and resistor 'R') for controlling-current flow through electrode terminal 12 to inhibit power dissipation into the medium surrounding the target site. Note: 5:26-29, 31-34, and 38-45.

Claim/		
. Element		
Claim 22/ Element	22. The electrosurgical system of claim 16 wherein the current limiting element is a passive current limiting element selected from the group consisting essentially of inductors, capacitors, resistors and combinations thereof.	
Claim 27/ Element		
A	27. The electrosurgical system, of claim 1 further comprising means for controlling power to the electrode terminal based on the electrical impedance between the electrode terminal and the return electrode.	Roce '198 shows in FIG. 4, inductor 25, whose input voltage is regulatable by variable tap 30, for controlling the power to electrode terminal 12 based upon impedance between it and return electrode 11. Note, 5:30-34.
Claim 30/ Element		
X.	30. The electrosurgical system of calm I when he had extrade to mainly the second control of the electrical break down of tissue in the immediate vicinity of the electrode terminal when high frequency voltage is applied between the electrode terminal and the return electrode in the presence of electrically, conducting fluid.	Roos '198 shows in FTG 1, and sensitally disseloses, electrode terminal' 12 and return electrode 11 configured for use in an electrically conductive fluid that affect the electrical break down of tissue in the immediate vicinity of electrode terminal 12 when high frequency voltage is applied between electrode terminal 12 and return electrode in in the presence of electrically conducting fluid, illustrated by flow path 49.
Claim 33/ Flement	33. The electrosurgical system of claim 1 wherein the electrode terminal has a distal portion configured for, generating high electric field intensities sufficient to cause molecular disintegration of a body structure at the target site.	Roos 198 shows and discloses electrode terminal 12 which has a distal pertion configured for generating high electric field intemistles sufficient to cause molecular disintegration of a body structure at the target site. Note, 2: 37-42.
Claim 38/ Element		., .

Claim/		
Element		, m
A	38. The system of claim the sherein the electrode terminal is configured for the cutting of tissue.	Poos '198 shows and discloses electrode terminal 12 configured for the cutting of tissue. Note, 2: 29-31.
Claim 41/ Plement		
λ.	11. The system of claim 1 wherein the electrode ferminal and the return electrode are configured, upon the application of sufficient voltage therebetween, to affect the ablation of tissue adjacent the electrode terminal such that a portion of such tissue is volumetrically removed.	Roos '198 shows and discloses electrode terminal 12 configured with respect to return electrode 11, such that upon the application of a voltage therebetween, tissue adjacent electrode terminal 12 is ablated such that a portion of same is volumetrically removed. Note, 2:37-42 (tissue removal) and 6:27-25 (tissue removal) and first predetermined depth).
Claim 42/ Element		
Α .	42. The system of claim 1 wherein the electrode terminal is disposed at the distal tip of the electrosurgical probe.	Roos '198 shows electrode terminal 12 being disposed at the distal tip of the probe. Note, 4:66-5:2, and 6:37-38.
Claim 43/ Element		
Α	43. The system of claim 42 wherein the return electrode is disposed proximally of the electrode terminal on the electrosurgical probe.	Roos '198 shows return electrode 11 being disposed proximally of the electrode terminal 12 on the probe. Note, 5:3-7.
Claim 44/ Element		
Α	44. The system of claim 1 wherein the electrode terminal is a flexible electrode terminal disposed at the distal tip of the probe.	Roos '198 shows and discloses electrode terminal 12 that is both flexible, and disposed at the distal tip of the probe. Note, 4:66-5:2.

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Claim/		
Element		
В	the flexible electrode terminal being extendable relative the distal tip of the probe.	Roos '198 shows for instance in FIG. 1, and discloses, flexible electrode terminal 12 as being extendable relative the distal tip of the probe, Note e.g., 6:12-16.
Claim 45/ Element		•
	45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comparising:	hoos '198 shows and discloses a combination of structures and elements, i.e., a system, (e.g., FIG. 4), for applying electrical energy in the form of high fraquency generator 15 for use in electrosurgical operations (e.g., clectro resection, as in the cose of bladder tumors and prostate glands, etc., 1:18-2).
В	a high frequency power supply:	Roos '198 shows the use of high frequency generator 15 and discloses use of same (e.g., 5:9).
c	an electrosurgical probe comprising a shaft having a proximal end and a distal end, an electrode terminal disposed near the distal end and a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrode terminal to the electrosurgical power supply:	Roos '198' generally shows an electrosurgical probe (ITG. 1) comprising shaft 13 having proximal and distal ends. Electrode terminal 12 is disposed near the distal end of shaft 13, with connectors schematically shown (ITGS. 4-6 6 9) near the proximal end of shaft 13 for electrically coupling electrode terminal 12 to electrosurgical power supply 15.
D	a return electrode electrically coupled to the electrosurgical power supply;	Roos '198 shows return electrode 11 electrically coupled to electrosurgical power supply 15 (e.g., FIGS. 4-6), and discloses same at 5:3-10.

Claim/	
Element	
E	Room '198 shows a fluid delivery clement (FIG. 1), manely the annular space bounded by the litterion of the wall of the litterion of the litterion of the litterion of litterio

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	Claim/		
	Element	<u> </u>	
	Claim 46/ Element		
	A	46. An electrosurgical system as in claim 45, wherein the return electrode forms a portion of the shaft of the electrosurgical probe.	Roos '198 shows in FIGS. 7 & 8, return electrode 11 that forms a portion of the shaft 13 of the electrosurgical probe.
	Claim 47/ Element		
	A	47. An electrosurgical system as in claim 46 further including an insulating member circumscribing the return electrode,	Roos '198 shows in FIGS. 7 & 8, insulating members 35 & 36 circumscribing return electrode 11. Note, 7:17-20.
20005COL	В	the return electrode being sufficiently spaced from the electrode terminal to minimize direct contract between the return electrode and the patient's tissue.	Roos '198 shows in FIGS. 7 6 8, return electrode ll sufficiently spaced from electrode terminal 12 to minimize direct contact between return electrode ll and the patient's tissue.
ŭ.	Claim 48/ Element		
12.0	λ .	48. An electrosurgical system as in claim 46, wherein the return electrode is an inner tubular member defining an axial lumen within the return electrode,	Room '198 shows in FIGS. 7 6 8, return electrode 11 as being an inner tubular member defining an axial lumen within the return electrode 11.
たいので	В	the axial lumen having an inlet in communication with the electrically conducting fluid supply and an outlet in fluid communication with the electrode terminal.	Roos '198 shows an axial lumen having an inlet in communication with the inherent electrically conducting fluid supply, and an outlet in fluid communication with electrode terminal 12.
	Claim 55/ Element		
	Α .	55. The electrosurgical system of claim 45 wherein the electrode terminal comprises a single active electrode disposed hear the distal end of the shaft.	Roos '198 shows electrode terminal 12 being a single active electrode disposed near the distal end of the shaft 13. Note, 4:66-5:2, and 6:37-38.

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Claim/		
Element		
Claim 57/ Element		
	57. The electrosurgical system of claim 45 further comprising a current limiting element for controlling current flow though the electrode terminal to inhibit power disaption into the medium surrounding the target site.	Noos '198 shows in FIG. 4, multiple current limiting elements (i.e., Inductor 25, capacitors 25, 26 etc., and resistor 'W') for controlling current lioe through electrode terminal 12 to inhibit power dissipation into the medium surrounding the target site. Note, 5:26-23, 31-34, and 38-45.
Claim 60/ Element		
	60. The electrosurgical system of claim 45 further comprising means for controlling power to the electrode terminal based on the electric impedance between the electrode terminal and the return electrode.	Roos '198 shows in FIG. 4, inductor 25, whose input voltage is regulatable by variable tap 30, for controlling the power to electrode terminal 12 based upon impedance between it and return electrode 11. Note, 5:30-34.
Claim 63/ Blement		
A .	63. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	Ross '198 shows an electrosurgical system (FTG. 4) for applyin electrical energy via high frequency generator 15 to a target site on structure within or on a patient' body (i.e., a bladder or prostate a d'salosed, for instance at 1:26).
в	a high frequency power supply:	Roos '198 shows the use of hig frequency generator 15 and disclose use of same throughout (e.g., 5:9)
c	an electronitysical probe comprising a haft having a proximal end and a distal end, an 'electrode tenminal disposed near the distal end, and a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrode terminal to the	Roos '198 generally shows as electrosurgical probe [EIG. 1] comprising shaft 13 having proxima and distal ends. Electrode termina 12 is disposed near the distal end of shaft 13, with connector: schematically shown [ITS, 4-6 & 9] near the proximal end of the shaff for electrically coupling electrod terminal 12 to the electrosurgica power supply IS.

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Claim/ Element		
D	a return electrode electrically coupled to the electrosurgical power supply;	Roos '198 shows return electrode l1 electrically coupled to electrosurgical power supply 15 (e.g., FIGS. 4-6), and discloses same at 5:3-10.
Ε	an electrically conducting fluid supply;	Roos '198 shows a fluid delivery element (FIG. 1), namely the annular space bounded by the interior of shaft wall 13 and the exterior of fiber optical system 17 (4:51-57), which defines fluid path 29 (FIG. 1) for fluid flow from a fluid supply.
F	a fluid delivery element defining a fluid path electrically coupled to the electrode terminal for directing electrically conducting fluid to the target site and the electrode terminal to substantially surround the electrode terminal conducting fluid belong the electrically conducting fluid here the electrode terminal and the target site.	soos '198 shown a fluid delivery clement (FIG. 1), namely the annular space bounded by the interior of shaft wall 13 and the exterior of fiber optical system 17 (4:51-57), which defines fluid path 29 (FIG. 1) for fluid path? 29 is in electrical context with return electrode 11 and context with return electrode 11 and nature will uperate a current flow path between return electrode 11 and electrode terminal 16 (see also, claim 1, 7,159 et seq.: "a space being formen between said treatment electrode and said neutral electrode should be seen and said neutral electrode and said selectrode and said electrode and electro

G III. Conclusion

As shown above, this Request raises a substantial new question of patentability of claims 1-3, 14, 16, 22, 27, 30, 33, 38, 41-48, 55, 57, 60 & 63 of the Eggers '536 Patent.

A certificate of Service attesting that a copy of this Request was served on the attorney of record of the patentee is submitted herewith. Also submitted herewith is a check in the amount of \$2,520.00 in compliance with 37 CFR 1.20(c).

Respectfully submitted,

Dated: /2/

Willer C. Fun.

December 23, 1999

William C. Fuess
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10951 Sorrento Valley Road
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San Diego, CA 92121-1613

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UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

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Reexam Control No.: 90/005,601 Art Unit 3763

A substantial new question of patentability affecting at least claims 1-3, 14, 16, 22, 27, 30, 33, 38, 41-48, 55, 57, 60 and 63 of U.S. Patent No. 5,697,536 to Eggers et al. is raised by the request.

The request indicates that the requester considers at least claims 1-3, 14, 16, 22, 27, 30, 33, 38, 41-48, 55, 57, 60 and 63 of Eggers et al. as being anticipated by U.S. Patent No. 4,116,198 to Roos under 35 U.S.C. 102.

It is agreed that a reasonable examiner would consider U.S. Patent No. 4,116,198 to Roos

To be important prior art which would clearly be material in the examination of the claims

To be important prior art which would clearly be material in the examination of the claims

To be important prior art which would clearly be material in the examination of the claims

The reference is therefore considered to raise a substantial question of patentability.

Manuel Antonio Mendez January 25, 2000

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SUPERVISORY PATENT EXAMINER



PATENT UNDER REEXAMINATION

UNITED STATES DEPARTMENT OF COMMERCE Patant and Trademark Office

Address COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

ATTORNEY COCKET NO.

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The request for re	examination has	ENYING REQUES been considered. Ide ling the determination	entification of the cla	
Allachment(s):] PTO-892, ⊠	PTO-1449, Other	· · · · · · · · · · · · · · · · · · ·	
The reque	st for reexaminat	tion is GRANTED.		•
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statement under 37 C.F.R. 1.530(b), no reply by requester is permitted.

2¹⁵ The request for reexamination is DENIED.

EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).

This decision is not appealable, 35 U.S.C., 303(c). Requester may seek review by petition to the Commissioner within ONE MONTH from the mailing date hereof, 37 CFR 1.515(c). EXTENSIONS OF TIME DNLY UNDER 37 CFR 1.185.

For Patent Owner's Statement (optional): TWO MONTHS from the mailing date hereot, 37 CFR 1,530(b).

For Fiequester's reply (optional): TWO MONTHS from the date of service of any patent owner's statement: 37 CFR 1.535. NO EXTENSION OF TIME IS PERMITTED. If patent owner does not file a timely

In due course, a refund under 37 CFR 1.26(c) will be made to requester (listed below if not patent owner)

by Treasury check, \(\begin{align*} \begin{align*} \text{Treasury check, } \\ \leftile \begin{align*} \text{yr credit to Deposit Account No.} \\ \text{unless notified otherwise, \$3 U.S.C. 303(d).} \end{align*}

unless notified otherwise, \$3 U.S.C. 303(d).

(Third party requester's correspondence address)

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Reexam Control No.: 90/005,601 Art Unit 3763

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A substantial new question of patentability affecting at least claims 1-3, 14, 16, 22, 27, 30, 33, 38, 41-48, 55, 57, 60 and 63 of U.S. Patent No. 5,697,536 to Eggers et al. is raised by the request.

The request indicates that the requester considers at least claims 1-3, 14, 16, 22, 27, 30, 33, 38, 41-48, 55, 57, 60 and 63 of Eggers et äl. as being anticipated by U.S. Patent No. 4.116.198 to Roos under 35 U.S.C. 102.

It is agreed that a reasonable examiner would consider U.S. Patent No. 4,116,198 to Roos

to to be important prior art which would clearly be material in the examination of the claims

as pointed out in detail in the request.

The reference is therefore considered to raise a substantial question of patentability.

Accordingly, recxamination of all the patent claims is deemed proper.

Manuel Antonio Memiez January 25, 2000

WYNE VICUS LLOGINS

U.S. PATENT DOCUMENTS

Exam Indi	equiner Document .		Date	T	Name		lass	Sub Class	Filing Date If Appropriate
15/	AA	4,116,198	09/26/78	Roos		Ŀ	128	303.15	05/14/76
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OTHER ART (Including Author, Title, Date, Pertinent Fages, Etc.)

EXAMINER: XX DATE CONSIDERED: JANUARY 20, 00

EXAMINER: Initial if citation considered, whether or not citation is in conformance with HFEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ..

Attorney Docket No.: 16238-000610

#10 1C32

CP2 0240

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner: M Mendez

37 CFR §1.97 and §1.98

INFORMATION DISCLOSURE STATEMENT UNDER

Art Unit: 3739

In re Patent of:

Kaje Zarzana

PHILIP E. EGGERS et al.

Application No. 90/005,601

Reexamination of Patent No.: 5,697,536

Issued: December 16, 1997

For System and Method For FLECTROSURGICAL CUITING AND ABLATION

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

The references cited on attached form PTO-1449 are being called to the attention of the Examiner. A copy of each is enclosed.

The Owner, ArthroCare Corporation, also brings the following information and list of materials to the attention of the Examiner. On February 13, 1998, ArthroCare Corporation filed a lawsuit in the United States District Court for the Northern District of California against defendants Ethicon, Inc., Mitck Surgical Products, Inc., and Gynecare, Inc., alleging infringement of U.S. Patent Nos. 5,697,590, 5,697,536, 5,697,281, and 5,697,882 (the "patents-in-suit"). The case was assigned Case No. C98-00609 WHO (the "Ethicon litigation"). The Ethicon litigation terminated in June 1999, with the defendants taking a license from ArthroCare under the patents-in-suit. The defendants have paid ArthroCare a license fee, and will pay ongoing royalties on sales in the United States of certain arthroscopy and gynecology products covered by these patents.

After the Ethicon litigation terminated, Owner was apprised by a third party of section 2001.06(c) of the Manual of Patent Examining Procedure ("MPEP") with respect to the prosecution of applications for patents other than those at issue in the Ethicon litigation and that were pending before the

Ethicon Hidgation was commenced, ramely, U.S. Application Nos. 08/807,111 (now U.S. Patent No. 5,891,095), 08/766,382 (now U.S. Patent No. 5,888,198), and 08/760,768 (now U.S. Patent No. 5,766,653).

Although not required to do so, Owner did bring the Ethicon litigation to the attertion of Examiner Mendez during the prosecution of at least U.S. Application Nos. 08/807,111 (now U.S. Patent No. 5,881,969), 08/766,382 (now U.S. Patent No. 5,881,969), and 08/795,686 (now U.S. Patent No. 5,871,469), during a telephone conference relating to those applications. Owner also submitted the prior art that was principally relied on by the defendants in the Ethicon litigation to Examiner Mendez during the prosecution of U.S. Application Nos. 08/807,111 (now U.S. Patent No. 5,891,095), 08/766,382 (now U.S. Patent No. 5,888,198), and 08/795,686 (now U.S. Patent No. 5,871,469). Indeed, Owner Stinders one of those pending applications, namely, U.S. Application No.08/807,111 (now U.S. Patent No. 5,881,095), from allowance to provide Examiner Mendez with the opportunity to consider those Eferences.

Accompanying this statement is a form listing references for the Examiner's consideration for connection with the present reexamination, including references principally relied on by the defendants by the Ethicon litigation.

In addition, Owner provides the following list of materials from the Ethicon litigation that geflect the defendants' and ArthroCare's primary arguments relating to issues of validity and forceability:

- ArthroCare's Complaint For Patent Infringement Of U.S. Letters Patent Nos. 5,697,909; 5,697,287; 5,697,882; and 5,697,536 filed February 13, 1998;
- Plaimiff ArthroCare's Motion For Preliminary Injunction Against Defendant Ethicon and Mitck, filed March 10, 1998.
- Answer and Counterclaim Of Defendants Ethicon, Inc., Mitck Surgical Products, Inc., and Gyoccare, Inc., filed April 6, 1998;
- Plaimiff ArthroCare's Motion To Strike Affirmative Defenses And To Strike Defendants'
 Counterclaim In Part Or, In The Alternative, For a More Definite Statement, filed April 17, 1998;
- Defendants' Opposition To ArthroCare's Motion To Strike Affirmative Defenses And To Strike Defendants' Counterclaim In Part Or, In The Alternative For A More Definite Statement And Points

And Authorities In Support Of Conditional Motion To File An-Amended Answer and Counterclaim, filed May 7, 1998;

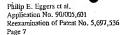
- ArthroCare's Reply In Support of Motion To Strike Affirmative Defenses And To Strike Defendants' Counterclaim In Part Or, In The Alternative, For A More Definite Statement, filed May 14, 1998;
- Memorandum Decision And Order Regarding ArthroCare's Motion To Strike And Defendants' Motion For Leave To File An Amended Answer And Counterclaim, issued June 5, 1998;
- Amended Answer And Counterclaim of Defendants Ethicon, Inc., Mitck Surgical Products, Inc., and Gynecare, Inc., filed June 22, 1998;
- 9. ArthroCare's Reply to Defendants' Amended Counterclaim, filed July 6, 1998;
- ArthroCare's Initial Disclosure Of Asserted Claims Pursuant To Local Rule 16-7, served March 30,
 1998;
- A. Defendants' Initial Disclosure of Prior Art Pursuant To Local Rule 16-7, served May 26, 1998;
- 2. Plaintiff ArthroCare's Corporation's Opening Claim Construction Brief, filed May 11, 1998;
- II3. Ethicon, Inc.'s Claim Construction Brief, filed May 22, 1998;
- 14 Joint Claim Construction Statement Pursuant To Civil Local Rule 16-11(b)(1) For Claim
- Construction Hearing, filed May 29, 1998;
- tt5. Plaintiff ArthroCare's Corporation's Reply To Defendants' Claim Construction Brief, filed May 29, 17, 1998;
- 46. Memorandum Decision And Order Regarding Claim Construction, issued July 6, 1998;
- Defendants' Petition For Permission To Appeal Pursuant To 28 U.S.C. §1292(b) filed with the U.S. Court of Appeals for the Federal Circuit on July 16, 1998;
- Plaintiff's Answer To Defendants' petition For Permission To Appeal Pursuant To 28 U.S.C. §1292(b), filed July 23, 1998;
- 19. Federal Circuit's Order On Petition For Permission To Appeal, issued August 20, 1998;
- Summary Of Defendant Ethicon's Opposition To Plaintiff ArthroCare's Motion For Preliminary Injunction, filed July 23, 1998;
- Ethicon's Opposition To Plaintiff ArthroCare's Motion For Preliminary Injunction, filed July 23, 1998.

- Declaration Of John R. LaCourse In Opposition To ArthroCare's Motion For Preliminary Injunction, filed July 23, 1998;
- Declaration Of Robert D. Tucker Filed In Support Of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction, filed July 23, 1998;
- Declaration Of Robert A. Armitage, Esq., Filed In Support Of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction, filed July 23, 1998;
- Supplemental Declaration Of Robert A. Armitage, Esq., In Support of Ethicon's Opposition To Plaintiff ArthroCafe's Motion For Preliminary Injunction, filed August 4, 1998;
- ArthroCare's Reply Memorandum In Support Of Motion For Preliminary Injunction, filed August 6, 1998;
- 47. Declaration Of James Doss In Support Of ArthroCare's Motion For Preliminary Injunction, filed August 6, 1998;
- 28. Reply Declaration Of Philip E. Eggers In Support Of ArthroCare's Motion For Preliminary of Injunction, filed August 6, 1998;
- Z. Reply Declaration Of John T. Raffle in Support Of ArthroCare's Motion For Preliminary Injunction, filed August 6, 1998;
- go. Ethicon's Supplemental Opposition To Plaintiff ArthroCare's Motion For Preliminary Injunction,
- th filed September 3, 1998.

 31. Supplemental Declaration Of Robert D. Tucker, Ph.D. M.D., Filed In Support Of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998.
- Supplemental Declaration Of John R. LaCourse, Ph.D., Filed In Support Of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998;
- 33. Direct Examination Of Robert D. Tucker, Ph.D., M.D., Filed In Support Of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction; filed September 3, 1998;
- 34. Direct Examination of Robert A. Armitage, Esq., Filed In Support Of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998;
- Direct Examination of John R. LaCourse, Ph.D., Filed In Support of Ethicon's Opposition To ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998;

- ArthroCare's Supplemental Memorandum In Response To The Supplemental Declaration Of Robert A. Armitage, filed September 3, 1998;
- Direct Testimony Of John T, Raffle In Support Of ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998;
- Direct Testimony Of Philip E. Eggers In Support Of ArthroCare's Motion For Preliminary Injunction, filed September 3, 1998;
- 39. Joint Statement Regarding Differences Between The Two Translations Of The Elsasser And Roos Article Proffered By Defendants, filed September 22, 1998;
- Memorandum Decision And Order Regarding Preliminary Injunction Motion, issued December 2, 1998;
- Q. Ethicon's Response To ArthroCare's First Set of Interrogatories To Defendant Ethicon, served Concerning November 6, 1998;
- 2. Plaintiff ArthroCare's Response To Defendant Gynecare, Inc.'s First Set Of Interrogatories, served
- November 10, 1998;
- 3. Plaintiff ArthroCare's Response To Mitck's First Set Of Interrogatories, served November 10, 1998;
- 144. Plaintiff ArthroCare's Response To Defendant Ethicon, Inc.'s First Set of Interrogatories, served
- 45. Plaintiff ArthroCare's Objections And Responses To Defendants' First Set Of Requests For
- Admissions, served January 4, 1999;
- Plaintiff ArthroCare's Objections and Responses To Defendant Gynecare, Inc.'s Second Set Of Interrogatories, served January 4, 1999;
- Plaintiff ArthroCare's Supplemental Objections and Responses to Defendants' Request For Admission No. 36, served January 5, 1999;
- Expert Wimess Report of John R. LaCourse, served January 8, 1999;
- 49. Expert Witness Report of Robert D. Tucker, served January 8, 1999;
- 50. Expert Witness Report of David J. Parins, served January 8, 1999;
- 51. Expert Witness Report of Robert A. Armitage, Esq., served January 8, 1999;
- 52. Expert Witness Report of Massoud Motamedi, Ph.D., served January 8, 1999;
- 53. Expert Witness Report of Ashley J. Welch, Ph.D., served January 8, 1999;

- 54. Responsive Expert Report of Leslie A. Geddes, Ph.D., served January 29, 1999;
- 55, Responsive Expert Report of Donald W. Banner served January 29, 1999;
- 56. Supplemental Expert Report of David J. Parins served February 9, 1999;
- Educon's Motion For Summary Judgment Of Invalidity For Failure To Satisfy The Requirements of 35 U.S.C. §§102-103, filed March 5, 1999;
- 58. Joint Statement Of Uncontested Facts in Support Of Ethicon's Motion For Partial Summary Judgment Of Invalidity Under 35 U.S.C. §§102 and 103, filed March 5, 1999;
- Plaintiff ArthroCare's Opposition To Defendants' Motion For Summary Judgment Of Invalidity Under 35 U.S.C. §§102-103, filed March 18, 1999;
- 60. Ethicon's Reply Memorandum In Support Of Motion For Summary Judgment Of Invalidity Under 35 O. U.S.C. §§102 and 103, filed March 25, 1999;
- Elicon's Motion For Partial Summary Judgment Of Invalidity For Failure To Satisfy The
- CI Requirements of 35 U.S.C. §112, filed March 5, 1999;
 US 62. Joint Statement Of Uncontested Facts In Support of Ethicon's Motion For Partial Summary Judement
- For Invalidity For Failure To Satisfy The Requirements Of 35 U.S.C. §112, filed March 5, 1999;
- 63. Plaintiff ArthroCare's Opposition To Defendants' Motion For Partial Summary Judgment Of
- Invalidity For Failure To Satisfy The Requirements Of 35 U.S.C. §112, filed March 18, 1999;
- 13. Ethicon's Reply Memorandum In Support Of Motion For Partial Summary Judgment Of Invalidity
- For Failure To Satisfy The Requirements Of 35 U.S.C. §112, filed March 25, 1999;
- 65. Declaration of Leslie A. Geddes, Ph.D., In Support of ArthroCare's Oppositions To Defendants Motions For Partial Summary Judgment, filed March 18, 1999;
- 66. Plaintiff ArthroCare's Motion For Partial Summary Judgment That Claims Are Not Anticipated Or Rendered Obvious By Certain References, filed March 5, 1999;
- Ethicon's Opposition To ArthroCare's Motion For Partial Summary Judgment That Claims Are Not Anticipated Or Rendered Obvious By Certain References, filed March 18, 1999;
- 68. ArthroCare's Reply Brief In Support Of ArthroCare's Motion For Partial Summary Judgment That Claims Are Not Anticipated Or Rendered Obvious By Certain References, filed March 25, 1999;
- Plaintiff ArthroCare's Motion For Partial Summary Judgment Of No Inequitable Conduct Or, Alternatively, For Bifurcation, filed March 5, 1999;



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- Joint Statement Of Undisputed Facts In Support Of ArthroCare's Motion For Partial Summary Judgment Of No Inequitable Conduct Or, Alternatively, For Bifurcation, filed March 5, 1999;
- Ethicon's Opposition Of Plaintiff ArthroCare's Motion For Partial Summary Judgment Of No Inequitable Conduct Or Alternatively For Bifurcation, filed March 18, 1999;
- Declaration of Robert A. Armitage, Esq., In Support Of Defendant Ethicon, Inc.'s Opposition To ArthroCare's Motion For Summary Judgment, filed March 18, 1999;
- Plaintiff ArthroCare's Reply Brief In Support Of Its Motion For Partial Summary Judgment Of No Inequitable Conduct Or, Alternatively, For Bifurcation, filed March 25, 1999;
- 74. Plaintiff ArthroCare's Motion For Partial Summary Judgment That Defendants Cannot Prevail On Their Enablement And Written Description Defenses As To Certain Claims, filed March 5, 1999;
- 45, Joint Statement Of Undisputed Facts in Support Of AnthroCare's Motion For Partial Summary

 C Judgment That Defendants Cannot Prevail Under Enablement And Written Description Defenses As

 To Certain Claims, filed March 5, 1999;
- To Ethicon's Opposition To ArthroCare's Motion For Partial Summary Judgment That Defendants

 Lannot Prevail On Their Enablement And Written Description Defenses As To Certain Claims, filed

 March 18, 1999:
- 7. ArthroCare's Reply Brief In Support Of ArthroCare's Motion For Partial Summary Judgment That
 7. Defendants Cannot Prevail On Their Enablement And Written Description Defenses As To Certain
 7. Claims, filed March 25, 1999:
- 78. Defendants' Trial Brief On The Issues Of Unenforceability And Invalidity Under 35 U.S.C. §§102, 103, and 112, filed March 29, 1999;
- Plaintiff ArthroCare's Trial Brief Re: Validity and Enforceability Of The Patents-In-Suit, filed April
 1999;
- 80. Defendants' Notice Of Prior Art Pursuant To 35 U.S.C. §282, filed April 9, 1999;
- 81. April 26, 1999 Letter From Defendants To The Court Regarding Additional Claim Construction Issues:
- Joint Proposed Jury Instructions For Claims 46, 55, 58, 59, 61, and 62 of U.S. Patent No. 5,697,536;

- 83. April 30, 1999 Letter From ArthroCare To The Court Regarding Additional Claim Construction Issues:
- 84. Expedited Motion Of Plaintiff ArthroCare Corporation Regarding Joint Jury Instructions, filed May 13, 1999;

In addition to the above-listed materials, there are numerous other papers that were filed with the Court in connection with the Ethicon litigation. Furthermore, depositions were taken of numerous witnesses regarding validity and enforceability issues. If the Examiner desires, Owner will submit any or all of the listed material, the other papers filed with the court, and/or transcripts of depositions to the Examiner for consideration. Owner will also provide any additional information that the Examiner desires about the Ethicon litigation or the materials described herein.

In addition to the Ethicon litigation, on July 25, 2001. Owner commenced an action in the Histrict of Delaware against Smith & Nephew, Inc. ("Smith & Nephew") for infringement of U.S. Patent Hos. 5,697,536 ("the '536 Patent"), 5,697,882 ("the '882 Patent") and 6,224,592 ("the '592 Patent"). That attion was assigned Civil Action No. 01-504-SLR. In response, Smith & Nephew filed a mirror image Seclaratory judgment action in the Northern District of California against Owner on August 31, 2001. The California action was assigned Case No. CV-01-03331 BZ to Magistrate Judge Zimmerman, but was later reassigned Case No. CV-01-03331 MHP to District Court Judge Pate! (the Delaware and California cases collectively are referred to herein as the "Smith & Nephew litigation"). In these actions, Smith & Nephew Sisserts that the '536 Patent, the '882 Patent and the '592 Patent are invalid and not infringed. In addition, Smith & Nephew contends that the '592 Patent is unenforceable for inequitable conduct. Specifically, Smith & Nephew argues that during prosecution of the '592 patent, Owner and its attorneys should have but did not explicitly point out to the Examiner a ruling in the Court's denial of a preliminary injunction motion (see the document listed as Item No. 40 above) from the Ethicon litigation that the so-called Roos '198 patent (U.S. Patent No. 4,116, 198) disclosed the use of conductive fluid. Smith & Nephew further argues that the Court's finding in denying the preliminary injunction motion was inconsistent with a position taken by Owner during prosecution of the '592 patent, namely, that the Roos '198 patent does not disclose conductive fluid. Smith & Nephew's inequitable conduct allegations are set forth or referred to in Item Nos. 86, 88, 89, 90, 91 and 92 below.

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The Smith & Nephew litigation is still pending before the District of Delaware. However, Smith & Nephew has agreed to dismiss the California litigation. Below is a list of materials from the Smith & Nephew litigation which include Smith & Nephew's primary arguments relating to validity and enforceability:

- 85. ArthroCare's Complaint For Patent Infringement Of U.S. Patent Nos. 5,697,536, 5,697,882 and 6,224,592 (including exhibits A--C), filed July 25, 2001;
- 86. Answer and Counterclaims of Smith & Nephew, filed September 13, 2001;
- 87. Plaintiff's ArthroCare Corporation's Motion to Enjoin Second-Filed, Duplicative Litigation; Plaintiff's Opening Brief in Support of its Motion to Enjoin Second-Filed, Duplicative Litigation (including exhibits A-F), filed September 10, 2001;
- 83. Defendant's Answer To Plaintiff's Opening Brief In Support Of Its Motion To Enjoin Second Filed

 Action (including exhibits A-C), filed September 24, 2001;
- 5. Motion Of Defendant Smith & Nephew, Inc. To Transfer Venue Pursuant To 28 U.S.C. §1404(a)
- D). Smith & Nephew's Complaint For Declaratory Judgment Of Patent Invalidity, Unenforceability And
 Non-Infringement (including exhibits A-C), filed August 31, 2001;
- 21. Smith & Nephew's Notice Of Related Case (including exhibits A-E), filed August 31, 2001;
- Smith & Nephew's Notice Of Pendency Of Other Action Pursuant To Civil Local Rule 3-13 (including exhibit A), filed August 31, 2001.
- ArthroCare's Statement In Opposition To Smith & Nephew's Notice Of Related Case (including exhibits A-B), filed September 14, 2001;
- ArthroCare's Statement In Opposition To Notice Of Pendency Of Other Action (including exhibits A--C), filed September 14, 2001.

Finally, the following is a list of co-pending applications relating to the technology covered by the '536 Patent:

Application No.	Filing Date	
08/761,096	05-Dec-1996	
09/026,852	20-Feb-1998	
09/041,934	13-Mar-1998	
09/258,516	26-Feb-1999	-
09/539,147	30-Mar-2000	
09/709,035	08-Nov-2000	
09/758,403	10-Jan-2001	
09/766,168	19-Jan-2001	
09/836,940	17-Apr-2001	
09/134,542	13-Aug-1998	
09/262,281 · ·	04-Mar-1999	
09/314,247	18-May-1999	
09/438,592 ·	12-Nov-1999	
09/484,087	18-Jan-2000	
09/504,530	15-Fcb-2000	
₩/273,612	22-Mar-1999	
09/360,075	23-Jul-1999	
19/197,013	20-Nav-1998	
09/629,251		
179/372,454	11-Aug-1999	_
19/845,034	27-Apr-2001	
09/570,394	12-May-2000	
D9/501,327	09-Feb-2000	
99/17/1,299	25-Jan-2001	
Ω9/054,660	03-Apr-1998	
09/338,842	23-Jun-1999	
09/347,390	06-Jul-1999	
09/062,869	20-Apr-1998	
09/735,426 09/354,835	12-Dec-2000	
	16-Jul-1999	
09/507,366	18-Feb-2000 30-Jun-1998	
09/477,832	05-Jan-2000	<u> </u>
60/299,094		
09/357.774	18-Jun-2001 21-Jul-1999	~ .
09/032,375	27-Feb-1998	 .
09/457,201	06-Dec-1999	
09/586,295	02-Jun-2000	
09/314,611	19-May-1999	<u>-</u>
09/361,674	27-Jul-1999	
9/791,504	22-Feb-2001	
9/293,231	16-Apr-1999	
19/313.956	18-May-1999	_
19/718,160	20-Nov-2000	-
9/313.957	18-May-1999	
0/276,863	16-Mar-2001	
9/464 884	16-Mar-2001	



Filing Date
28-Sep-1998
01-May-2000
30-Jan-2001
12-Jan-2000
10-Jan-2000
06-May-1998
01-May-2000
26-Jun-2000
05-Feb-2001
20-Apr-2001
09-Fzb-2001
· 09-Jul-2001
16-May-2000
· 04-Oct-1999
18-May-2001
20-Feb-1998
· 24-Fcb-2000
06-Jan-2000
03-May-2001
19-Sep-2000
19-Jan-2001
08-Nov-2000
11-Oct-2000
28-Sep-2000
20-Dec-2000
03-Oct-2000
18-Jun-2001
18-Jun-2001
28-Feb-2001

Respectfully submitted,

John T. Raffle Reg. No. 38,58

ArthroCare Corporation 595 N. Pastoria Avenue Sunnyvale, CA 94086 (408) 736-0224

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CERTIFICATE OF SERVICE

I hereby certify that on this 12th day of October, 2001, a true and correct copy of the document listed below was caused to be served on the attorneys of record at the following addresses as indicated:

Information Disclosure Statement and Form PTO-1449

BY U.S. POSTAL SERVICE FIRST CLASS MAIL

William C. Fuess FUESS & DAVIDENAS 10951 Sorrento Valley Road, Suite H-G San Diego, CA 92121-1613

Executed on October 12, 2001 at Sunnyvale, California.

Katie Zarzana

	-1449 (Modified)		Attorney Docket No. 16238-000610	Patent	Patent No.: 5,697,536		
APPLICANT STATEMENT	PATENTS AND PUBL P'S INFORMATION P 1 sheets if necessa	DECESTRATE OF THE PARTY OF THE					
		2 1 6 7001	Applicant: PHILIP E.	EGGERS 6	t al.		
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Reference	Designation	. u.s	. PATENT DOCUMENTS				
Examiner - Init/al	Document No.	Date	Name	Class	Sub- class	Filing Dat	
AA AA	4,682,596	07/28,1987	Bales et al.	128.	303		
AB	5,514,130	05/07/96	Baker .	606.	41		
AC AC	5,078,717	01/07/92	Parins et al.	606	48	12	
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.ZAE	5,697,882	12/16/97	Eggers et al.	504	114		
AF	5,697,909	12/16/97	Eggers et al.	604	114	† ÷	
A.G.	5,725,524	03/10/98	Mulier et al.	606	41		
Н ДН	5,609,151	03/11/97	Mulier et al.	128	642		
AI	4,043,342	08/23/97	Morrison, Jr.	128 -	303 .		
LA.	4,184,492	01/22/80	Meinke et al.	128	303		
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Z Zu	97/00647	01/09/97	WIPO	A61B .	17/39		
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AN	EP 0 703 461	03/27/96	Europe .	GO1R	27/02		
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Z AR	98/27880	07/02/98	WIPO	A61B	17/39		
7	OTHER ART (including Autho	r, Title, Date, Pertin	ent Page:	F, Etc.)		
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· ·		10 8	Applicant: PHILIP E.	EGGERS e	t al.			
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Z) AT	4,706,667	11/17/87	Roos	128	303			
AU AU	5,584,872	12/17/96	LaFontaine et al.	607	117	1		
VAV	5,676,693	10/14/97	Lafontaine et al.	607	116	4 1		
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JAX	5,080,660 1	01/14/92	Buelna	606	45	1		
AY.	- 5,417,687 .	05/23/95	Nardella et al	606	32.	1 +		
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Жа́ВВ	5,112,330	05/12/92	Nishigaki et al:	606	46			
BC BC	5,843,019 .	12/01/98	Eggers et al	604.	22			
BD	5,871,469	02/16/99	Eggers et al.	604	114			
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BF	2 327 350	01/27/99	UK	A61B	17/39			
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ELMINER: Initial if reference considered, whether or not citation is in conformance with HPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

DATE CONSIDERED

EXAMINER

Patent No.: 5,697,536: FORM PTO-1449 (Modified) Attorney Docket No. 16238-000610 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISTOPURE STATEMENT (Use several sheets if necessary) BCT 1 6 2001 Applicant: PHILIP E. EGGERS et al. Issue Date: Group: 3739 December 16, 1997 THADEKE Reference Designation U.S. PATENT DOCUMENTS . Document No. Date Class filing Date class D BM 5,192,280 03/09/93 Parins 606. 48 . . 09/02/97 Desai 606 BN 5,662,680 210 5,249,585 10/05/93 Turner et al. 607. 99. ٠., BO 1 --5.190.517 03/02/93 Zieve et al. 604. 22 : . . BP 5.366.443 11/22/94 Eggers et al. 604-114 BO 606 BR 5,122,138 06/16/92 Manwaring 46 BS 5.330.470 07/19/94 Hagen 606 42 37 BT 5,647,869 07/15/97 Goble et al. 606 🖹 BU 4,040,426 08/09/77 Morrison, Jr. 128 303 为 ev 4.548.207 10/22/85 peimele' 128 303 BW 4.823.791 04/25/89 D'Amelio et al. 123 303 EAX 03/24/92 Rydell . 606 5.098.431 48 BY FOREIGN PATENT DOCUMENTS Class Document No. Date Country Sub-Translarion class (ves/ool ₽ BZ WC 94/04220 03.03.94 WIPO A61N 1/06 yes TE CA 97/24073 07/10/97 WITEO A61B 17/39 17/39 CB 97/24993 07/17/97 WIPO A61B 97/24994 07/17/97 WTPO A61B. 17/39 97/48346 . WIPO AGIB /co 12/24/97 17/39 CE 96/00042 01/04/96 WIPO A61B 17/39 OTHER ART (Including Author, Title, Date, Portinent Pages, Etc.) CF J.W. Ramsey et al. Urological Research Vol. 13, pp. 99-102 (1985). Slager et al. JACC 5(6):1382-6 (1985). EXAMINER DATE CONSIDERED April 29, 2002

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СН	5,217,457	06/08/93	Delahuerga.et al. :	606	42 -	7	
CI	4,240,441	12/23/89	Khalil .	-128.	692		
Z CJ	5,197,963	03/30/93	Parins :	606	46.	. ;-	
CK .	5,944,715 .	08/31/99	Goble et al.	-606	42	- 1-	
PCL	5,057,106	10/15/91	Kasevich et al. :	606	33		
CM CM	4,860.752	08/29/89	Turner	128 .	422		
15 CN	5,807,395	09/15/98	Mulier et al.	606	.41		
XZ CO	5,700,262	12/23/97	Acosta et al.	606	48		
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CQ	5,035,696	07/30/91 .	Rydell	606	47 .		
CR	5,749,869	05/12/98	Lindenmeier et al.	606	34		
道 cs	5,267,997	12/07/93	Parin et al :	606	38		
7/cr	5,281,218	01/25/94	Intan	605	41		
y cu	5,125,928	06/30/92	Parins et al.	.506	48		
₹CV ·	5,496,312	03/05/96	Klicek	606	34		
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DCM	98/07468	02/26/98	WIPO .	761N .	1/40		
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FORM PTO-	1449 [Modified]		Attorney Docket No. 16238-000610	Patent	No.: 5.6.	97.536
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		(OCT 1 6 2001 g	Applicant: PHILIP E.	EGGERS e	t al.	
		THADE WARE OF	Issue Date: December 16, 1997	Group:	3739	
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DD DD	5,810,809	09/22/98.	Rydell	-606	4.9	. :
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DF	5,885,277	03/23/99 .	Korth	606	,35	· ·
DG.	6,068,628	05/30/00	Fanton et al	606	41	
DH	6,238,391	05/29/01	Olsen et al.	606	41 :	:
DI	6,254,600	07/03/01	Willink et al.	606	41	
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Z DP	6,056,746	05/02/00	Goble et al.	506	48	
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Z DU	57-117843	07/22/82	JP .	A61B	17/39	
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DY	Slagger et al.	. Kardiol. 76:	Suppl. 6, 67-71 (1987)			
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EXMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO	-1449 (Modified)		Attorney Docket No. 16238-000610	Patent	No.: 5,	697,536
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D2	5,681,282	10/28/97	Eggers et al.	604	114	T .
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EB	5,766,153	06/16/98	Eggers et al.	604	114	
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A ED	5,683,366	11/04/97	Eggers et al.	604	114	1
5 EE	4,727,874	63/01/88	Bowers et al.	128	303	T
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EI	5,888,198	03/30/99	Eggers et al.		T	·
2/3	5,891,095	04/06/99	Eggers et al.	· ·	1	T:
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Paper #11

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September 19,2002

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FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE **			Attorney Docket No. 16238-000618	Patent	No.: 5,6	97,536
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SA	Dobie, A. K., Aspects of Sur	Bio-Medical E gical Diather	ngincering, 05/69, pp.	206-216,	"The Ele	ctrical
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	Piercy H.D., J "Electrosurgic Development an	. R. A., Gast al Treatment d Testing of	roenterology V74, no. 3 of Experimental Bleedin a Computer Control and	, pp. 52 g Canine a Better	7-534, 19 Gastric Electrod	76, Ulcara:
4	Dennis, M. B., Evolution of Gastric Olcers	Digestive Di Electrofulgur	seases and Sciences, V2 ation in Control of Ble	4, no. 1 eding of	L. pp. 84 Experime	5-848, ntal
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PTO FAX NO.: 1 (703) 746-9251 Atm.: Examiner M. Mendez Art Unit: 3739

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Any Docket No. 16238-000610

Paper #11

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following Information Disclosure Statement and PTO.

1449 in re Application of Philip E. Eggers et al., Recramination No. 90/005,601, for SYSTEM

AND METHOD FOR ELECTROSURGICAL CUTTING AND ABLATION is being facsimile
transmitted to the Patent and Trademark Office on the date shown below.

Number of pages being transmitted, including this page: 180

Dated: June 14, 2002

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Attorney Docket No.: 16238-000610

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner: M Mendez

37 CFR \$1.97 and \$1.98

INFORMATION DISCLOSURE STATEMENT UNDER

Art Unit: 3739

In re Patent of:

PHILIP E. EGGERS et al.

Application No. 90/005,601

Reexamination of Patent No.: 5,697,536

Issued: December 16, 1997

For: SYSTEM AND METHOD FOR ELECTROSURGICAL CUTTING AND ABLATION

Assistant Commissioner for Patents Washington, D.C. 20231

E SIC.

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The references cited on attached form PTO-1449 are being called to the attention of the Examiner. These references were brought to Applicant's attention through the Smith & Nephew litination referred to in the previously submitted DS. Also being submitted are the following documents provided by the defendant, Smith & Nephew, in the aforementioned litigation:

 i) Ten pages from Smith & Nephew's supplemental invalidity response regarding the reexamination patent at issue (pages 1-9 and a cover page dated June 3, 2002).

Received note < 401 130 9143 > at 6/18/02 1:12:44 PM (Castern Daylight Three)

Philip E. Eggers et al. Application No. 90/005,601 Recxamination of Patent No. 5,697,536 Page 2

ii) 36 pages of "Exhibit A" from Smith & Nephew's supplemental invalidity response. Applicant notes that this document refers to Reference nos. 1-13, 15-31, 33-62, and 64-73 (Reference nos. 14, 32, and 63 are omitted). The Smith & Nephew's supplemental invalidity response cross references these Reference Nos. to the publication information. Applicant notes that Reference nos. 8, 15, 18, 19, 20, 22, 23, 25-27, 29, 31, 34, 35, 39, 41, 42, 45, 48, 49, 51, 53, 54, 58, 62, 64, 65, and 68 were previously considered during either reexamination or prosecution of the patent and are not included in this IDS.

Sánjay R. Ragade Reg. No. 42,280

AmbroCare Corporation 680 Vaqueros Ave. Sunnyvale, CA 94085 (408) 736-0224

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	LIST OF P	1449 (Modified) TENTS AND PUBL S INFORMATION	CATIONS FOR	Attorney Docket No. 16238-000610	Patent	No.: 5,69	7,536	
	STATEMENT				}			
-	fase zenêrar	sheets 1f necessa	-11	Applicant: PHILIP E.	EGGERS et	: al		
- 1				Issue Date: December 16, 1997 .	Group:			
- 1	Reference	Designation	U.5	, PATENT DOCUMENTS	٠			
	Examination	Bocument Bo.	Bate .	Yane	Class	dub class	Filing Gate	
- 1	-Z-	2,056,377	08/16/33	Wappler	128	303.14		
ĵ		3,815,604	06/11/74	O'Malley et al.	128 -	305		
- 1		3,828,780	08/13/74	Morrison Jr	128 .	275.1	-	
. [3,901,242	08/26/75	Storz	128	303.15		
ı		3,920,021	11/18/75	Hiltebrandt	128	303.17		
ı	- 7	3, 939, 839	02/24/76	Curtiss	128	303.15	-	
୍ଷ		3,970,088	07/20/76	Horrison .	128	303.14		
H		4,074,718	02/21/78	Morrison, dr.	128	303.14		
0		4,181,131	01/01/80	Ogiu	128	303.15		
9		4,590,934	05/27/86	Malis et al.	128	303.14		
3		4,660,571	04/28/87	Hess et al.	128 .	784		
đ		4,785,823	11/22/88	Eggers et al.	128 .	692		
Ħ		4,805,616-	02/21/89	Pao	128 . '	303.17		
Ţ.		4,832,048	05/23/89	Cohen	128	786.		
1		4,920,978	05/01/90	Colvin	128	784		
H		4,936,281	06/26/90	Stasz	128 .	660.03		
4		4,966,597	10/30/90	Cosman	606 -	50		
4		5,009,656	04/23/91	Reimels	606	48		
T	1 .	5,047,026	09/10/91	Rydell	606	48	-	
- 1	.	5,047,027	09/10/91	Rydell	606	48		
r		5,084,044	01/28/92	Quint .	606	27		
		5,085,659	02/04/92	Rydell	606	47		
-		5,088,997 `	02/18/92	Delahuerga et al.	606 .	12		
	1.	5,167,659	12/01/92	Ohtomo et al.	606	40		
T		5,171,311	12/15/92	Rydell et al. :	606 · ·	48		
Г		5,207,657	05/04/93	Canady	606	40		
Ī		5;217,459	06/08/93	Kamerling	606	48		
1	1	5,306,238.	04/26/94	Fleenor	606	42		
1		5,423,882	06/13/95	Jackman et al.	607	127 .	· .	
-	X	5,454,809/	10/03/95	Janasen	606	41		

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September 19,2003

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FORM PTO-1445 (Modified) Attorney Docker No. Patent No.: 5,697,536					97,536	
APPLICAN STATEMEN	PATENTS AND PUBLI IT'S INFORMATION D IT	ISCLOSURE				
			Applicant: PHILIP E.	EGGERS of	t al.	
			Isaue Date: December 16, 1997	Group:	•	
		FORE	GN.PATENT DOCUMENTS			_
Intel	Dacument No.	Date	Kame			Translation (yes/no)
5	2 313 949/ N 76 17587	01/07/77	Biltebrandt et al.	_		Yes
\mathcal{A}	NO 90/03152	04/05/90	Considine et al.		-	
	DE 3930451 A1	03/21/91	Boffman et al.		حــــ	Yes
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			or, Title, Bats, Pertin			
	Bobie, A. K., Aspects of Sur	Hio-Medical En gicul Diatherm	gineering, 05/69, pp.	205-216.	"The Ele	ctrical
Z	Honig, William M., IEEE Transactions on Biomedical Engineering, "The Mechanism of Cutting in Electrosurgery"					
5	Electrosurgica	al Trestment o	centerology V74, no. 3 f Experimental Bleedin Computer Control and	Canine	Gastric	Ulcers:
Z	Dennis, M. B., Evolution of S Gastric Ulcers	lectrofulgura	eases and Sciences, V2 tion in Control of Ble	, no. 11 ding of	, pp. 84 Experime	5-8(8, ntal
	effect of radio	frequency generates of	American Heart Journal, crated thermal energy of f the arterial wall in	on the me	chanical	and
\mathbf{X}	Swain, CP, Gue endoscopio meth	V25, pp. 1424- ods of electro	-1431, "Which Electrode occasgolation in experi	?, A compensal bl	parison e	of four lcers"
Z.	Tucker, Robert Urologic Applic Probes	D., Journal of ation of Bipol	f Orology, V141 pp662-1 lar Versus Honopolar Fi	65, "A Co ve French	omparison h Electro	of surgical
Sh	Molding of Athe	rosclerotic Va	no. 5, pp. 1167-1175, iscular Tissue with Use ncy Balloon Angioplasty	of Radio	Compress: ofrequenc	y Energy:
\mathcal{L}	Olsen MD, Bipol 20707/91	ar Laparoscopi	c Cholecatectomy Lectu	re (marke	ed confic	lential),
	1/, 5/,					
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CONTROL initial if reference considered, whether or not ciration is in contormance with MPEP 609; DES ine through citation if not in conformance and not considered. Include copy of this form with next commingation to confident. Frederick P. Fish

W.K. Richardson

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FISH & RICHARDSON P.C.

Suite 100 Redwood City, California 94063-1526

Telephone

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Perry Clark, Esquire Weil, Gotshal & Manges LLP 201 Redwood Shores Parkway Redwood Shores, CA. 94065

BY FAX AND MAIL

June 3, 2002 .

Arthrocare Suit - Delaware USDC-D. Del. - C.A. No. 01-504-SLR

Dear Perry:

I have enclosed Smith & Nephew's supplemental invalidity responses for the independent claims asserted against the Electroblade and Saphyre products. These responses are subject to and made without waiving Smith & Nephew's previous objections to ArthroCare's discovery requests. We reserve the right to revise these responses as discovery proceeds. In particular, we reserve the right to revise these responses after we have received meaningful discovery on ArthroCare's claim construction and infringement contentions, and after the Court has construed the asserted claims.

Very truly yours,

Curtis MacFerrin

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Smith & Nephew's Second Supplemental Response Re Invalidity

In addition to its previous objections, and without waiving any of those objections, Smith & Nephew also objects to providing its invalidity contentions at this time, since ArthroCare has refused to provide any of its contentions with respect to construction of the claims of its patents. Accordingly, Smith & Nephew reserves the right to supplement, amend, or otherwise modify its invalidity contentions as the case proceeds, and particularly after ArthroCare provides its proposed claim construction and/or after the Court constructs the claims of ArthroCare's patents.

Nevertheless, as of the present time, Smith & Nephew incorporates its previous responses by reference, and further responds as follows:

Certain of Smith & Nephew's invalidity contentions are based on invalidity under 35 U.S.C. § 102 and/or § 103 in view of certain prior art references. In the interest of brevity and convenience, rather than repeat the full names of those references in connection with each such contention, Smith & Nephew will instead refer to those references by number, in accordance with the following table:

		•	•	
#	Issue/ Pub ¹ n Date	Patent Number/ Publication	Inventor/Author	Title
1	08/16/33	US 2,056,377	F.C. Wappler	Electronic Instrument
2	05/00/69	Bio-Medical Engineering 206- 216	A.K. Dobbie	The Electrical Aspects of Surgical Diathermy
3	06/11/74	US 3,815,604	Conor C. O'Malley, Raiph M. Heintz, Sr.	Apparatus For Intraocular Surgery
4	08/13/74	US 3,828,780	Charles F. Morrison, Jr.	Combined Electrocoagulator- Suction Instrument
5	01/00/75	Transactions On Hiomedical Engineering	William M. Honig	The Mechanism of Cutting in Electrosurgery

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Ħ	Issue/ Pub'n Date	Patent Number/ Publication	Inventor/Author	Title
6	08/26/75	US 3,901,242	Karl Storz	Electric Surgical Instrument
7	11/18/75	US 3,920,021	Siegfried Hiltebrandt	Congulating Devices
8	00/00/76	Acta Medicotechnica (Medizinal- Markt), Vol. 24, No. 4, 1976 129 – 134	E. Elsasser and E. Roos	Uber ein Instrument zur leckstromfreien transurethralen Resection (Concerning An Instrument for Transurethral resection without leakage of current)
9	02/24/76	US 3,939,839	Lawrence E. Curtiss	Resoctoscope and Electrode Therefor
10	07/20/76	ŲS 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
11	01/07/77	2 313 949/ N 76 17587	Siegfried Hiltebrandt - et Ludwig Bonnet .	Boucle de sectionnement a une ou deux branches pour resertoscope
12	00/00/78	Gastroenterology, Vol. 74, No. 3, 527-534, 1978	J.R.A. Fiercey, M.D., D.C. Auth, Ph.D. P.E. F.E. Silverstein, M.D., H.R. Willard, Ph.D., M.B. Dennis, D.V.M. D.M. Ellefson, B.S., D.M. Davis, M.S.E.E., R.L. Protell, M.D. and C.E. Rubin, M.D.	Electrosurgical Treatment of Experimental Bleeding Canine Gastric Ulcers: Development and testing of a computer control and a better electrode
13	02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
14	06/06/78	US 4,092,986	Max Schneidennan	Constant Output Electrosurgical Unit
15	09/26/18	US 4,116,198 and its file history	Eberhard Roos	Electro-Surgical Device
16	11/00/79	Digestive Diseases and Sciences, Vol. 24, No. 11, 845-848	M.B. Dennis, J. Peoples, R. Hulett, D.C. Auth, R.L. Protell, C.E. Ruhin, and F.E. Silverstein	Evolution of Electrofulguration in Control of Bleeding of Experimental Gastric Ulcers

Ħ	Pub'n Date	Patent Number/ Publication .	Inventor/Author	Title
17	01/01/80	US 4,181,131	Hisao Ogin	High Frequency Electrosurgical Instrument for Cutting Human Body Cavity Structures
18	01/22/80	US 4,184,492	Hans H. Meinke, Gerhard Flachenecker, Karl Fastenmeier, Friedrich Landstorfer, Heinz Lidenmeier	Safety Circuitry for High Frequency Cutting and r Coagulating Devices
19	11/11/80	US 4,232,676	Andrew Herezog	Surgical Cutting Instrument
20	02/03/81	US 4,248,231	Andrew Herezog and James A. Murphy	Surgical Cutting Instrument
21	02/00/82	CRC Press, American Heart Journal, Vol. 117, 332-341	Kevin J. Barry, M.E., Jonathan Kaplan, MD, Raymond J., Connolly, Ph.D., Paul Nardella, BS, Benjamin J. Lee, MD, Gary J. Becker, MD, Bruce F. Waller, MD, and Allan D. Callow, MD, Ph.D	The effect of radiofrequency- generated thermal energy on the mechanical and histologic characteristics of the arterial wall in-vivo: implications for radiofrequency angioplasty
22	04/27/82	US 4,326,529	James D. Doss and Richard L. Hutson	Corneal-Shaping Electrode
23	04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal-Shaping Electrode with Flexible Removable Skirt
24	00/00/84	Gut, 25, 1424- 1431	C.P. Swain, TN Mills, E. Shemesh, Julis M. Dark, M.R. Lewin, J.S. Clifton, T.C. Northfield, P.B. Cotton, and P.R. Salmon	Which Electrode? A comparison of four endoscopic methods of electrocoagulation in experimental bleeding ulcus

Ħ	Issue/ Pub'n Date	Patent Number/ Publication	Inventor/Author	Title
25	00/00/85	Urological Research 13:99- 102	J.W.A. Ramsay, N.A. Shepherd, M. Butler, P.T. Gosling, R.A. Miller, D.M.A. Wallace, H.N. Whitfield	A Comparison of Bipolar and Monopolar Diathermy Probes in Experimental Animals
26	06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurblers, BSc, Nicolaas Bom, Ph.D, Patrick W. Serruys, MD, Gent T. Meester, MD, FACC	Vaporization of Atheroscierotic Plaques by Spark Erosion
27	10/22/85	US 4,548,207	Harry G. Reimels	Disposable Coagulator
28	05/27/86	US 4,590,934	Jerry L. Malis, Leonard L Malis, Robert R. Acorcey, David Solt	Bipolar Cutter/Coagulator
29.	00/00/87	Kardiologie, Kardiol.76: Supp. 6, 67-71 (1987)	C.J. Slager, A.C. Phaff, C.E. Essed, J.C.H. Schnurbiers, N. Bons, V.A. Vandenbroucke, and P.W. Schuys	Spark Erosion of Arteriosclerotic Plaques
30	04/28/87	US 4,660,571	Stanley R. Hess, Texti Kovaes	Percutaneous Lead Having Radially Adjustable Electrode
31	06/23/87	US 4,674,499	David S.C. Pao	Coaxiel Bipolar Projec
32	07/00/88	Valleylab Fart Number 945 100 102 A	Valleylab, Inc.	Surgistat Service Manual
33	11/22/88	US 4,785,823	Philip E. Eggers, Robert F. Shaw	Methods And Apparatus For Performing In Vivo Blood Thermodilution Procedures
34	00/00/89	SPIE Vol. 1068 Catheter-based Sensing and ' Imaging Technology	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback

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#	Lisue/ Puh'n Date	Patent Number/ Publication	Inventor/Author	Title
35	00/00/89	The Organizing Committee of the 7th World Congress on Endourology and ESWL Foundation for Advancement of International Science	Robert Tucker and Stefan Locning	A Bipolar Electrosurgical Turp Loop
36	02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
37	03/00/89	Journal of Urology Vol. 141, 662-665	Robert D. Tucker, Eugene V. Kramolowsky, Eric Bedell and Charles E. Platz	A Comparison of Urologic Application of Bipolar Versus Monopolar Five French Electrosurgical Probes
38	04/00/89	JACC Vol. 13 No. 5, 1167-75	Recjamin I. Lee, MD, FACC, Gary J. Becker, MD, Bruce F. Waller, MD, FACC, Kevin I. Barry, MS, Raymond J. Connolly, Ph.D, Jonathan Kaplan, MD, Alan R. Shapiro, MS, Paul C. Nardella, BS	Thermal Compression and Molding of Atheroselentic Vascular Tissue With Use of Radiofrequency Energy: Implications for Radiofrequency Balloon Angioplasty
39	04/25/89	US 4,823,791	Frank D. D'Amello, Dawn M. DeLemos, Dominick G. Esposito, Michelle D. Maxfield, Claude E. Petruzzi, Robert H. Quint	Electrosurgical Probe Apparatus
40	05/23/89	US 4,832,048	Donald Cohen	Suction Ablation Catheter
41	00/00/90	Urological Research 18:291- 294	R.D. Tucker, E.V. Kramolowsky, and C.E. Piatz	In vivo effect of 5 French bipolar and monopolar electrosurgical probes on the porcine bladder

ü	Issue/ Pub'n D≄te	Patent Numberl Publication .	Inventor/Author	Title
R.	02/00/90	Journal of Urology Vol. 143, 275-277	Eugene V. Kramolowsky and Robert D. Tucker	Use of 5F Bipolar Electrosurgical Probe in Endoscopic Urologiical Procedures
43	04/05/90	WO 90/03152	John Considine, John Colin	Plectro-surgical Apparatus for Removing Tumours from Hollow Organs of the Body
44	05/01/90	US 4,920,978	David P. Colvin	Method and Apparatus for the Endoscopic Treatment of Dee Tumors Using RF Hyperthermia
45	06/05/90	US 4,931,047	Alan Broadwin, Charles Vassallo, Joseph N. Logan, Robert W. Horalein	Method and Apparatus For Providing Enhanced Tissue Fragmentation And/Or Hemostasis
46	06/26/90	US 4,936,281	Peter Stasz	Ultrasonically Enhanced RF Ablation Catheter
47	10/30/90	US 4,966,597	Eric R. Cosman	Thermometric Cardiac Tissue Ablation Electrode with Ultra- Sensitive Temperature Detection
48	12/11/90	US 4,976,711	David J. Parins, Mark A. Rydell, Peter Stasz	Ablation Catheter With Selectively Deployable Electrodes
49	12/25/90	US 4,979,948	Lesslie A. Geddes, Marvin H. Hinds, Joe D. Bourland, William D. Voorhees	Method and Apparatus for Thermally Destroying A Laye of An Organ
50	03/21/91	DE 3930451 A1	Ellen Hoffmann, Gerhard, Steinbeck, Rudi Mattmuller	Vorrichtung für die Hochfrequenzkoagulation von biologischem Gewebe
51	04/1 <i>6</i> /9 i	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument Having Needle Cutting Electrode And Spot-Coag Electrode
52	04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical Instrument
	02/30/01	110 5 015 606	Mark A Rudell	Electrosurgical Instrument for

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#	Issue/ Pub'n Date	Patent Number/ Publication	Inventor/Author	Title
54	09/00/91	Journal of Urology Vol. 146, 669	Eugene V. Kramolowsky and Robert D. Tucker	The Urological Application of Electrosurgery
55	09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement For Tunneling Through Tissue
56	09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector
57	10/07/91	Eipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsea	Bipolar Laparoscopic Cholecystectomy
58	01/14/92	US 5,080,660	Terrence J. Buelna	. Electrosurgical Electrode
59	01/28/92	US 5,084,044	Robert H. Quint	Apparatus for Endometrial Ablation and Method of Using Same
60	02/04/92	US 5,085,659	Mark A. Rydell .	Biopsy Device With Bipolar Congulation Capability
61	02/18/92	US 5,088,997 .	Louis Delahuerga, Robert B. Stoddard, Michael S. Klicek	Gas Congulation Device
62	03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
63	04/28/92	US 5,108,391	Gerhard Flachenecker, Karl Fastenmeier, Heinz Lindenmeier	High-Frequency Generator For Tissue Cutting And For Coagulating In High- Frequency Surgery
64	05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
65	06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing Accessory and Method for an Endoscope
66	12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
67	12/15/92	US 5,171,311	Mark A. Rydell, David J. Pauns, Steven W. Berhow	Percutaneous Laparoscopic Cholectectomy Instrument
58	03/30/93	US 5,197,963	David I. Parins	Electrosurgical Instrument with Extendable Sheath for Itrigation and Aspiration
59	05/04/93	US 5,207,675	Jerome Canady	Surgical Coagulation Device

Artherosclerotic Plaque By Radio Frequency Sparking . 14

73 10/03/95

Michael Janssen

1. U.S. Patent No. 5,697,536 ("the '536 patent")

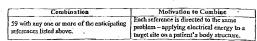
US 5,454,809

A. Claim 45

Smith & Nephew contends that claim 45 of the '536 patent is anticipated by at least each of the following references: 3, 8, 9, 12, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 35, 36, 37, 38, 41, 42, 43, 45, 46, 48, 49, 51, 52, 53, 54, 57, 65, 66, 67, 70.

Smith & Nephew also contends that claim 45 of the '536 patent would have been obvious to one of ordinary skill in the art at the time of the lavention in view of at least each of the following combinations of references, which Smith & Nephew contends would have been combined for at least the following reasons:

Combination	Motivation to Combine
Any one or more of 1, 4, 5, 6, 7, 10, 11, 13, 17, 30, 33, 39, 40, 44, 50, 55, 56, 58, 60, 61, 62, 64, 68, 69, 71, 72, 73 with any other one or more of the anticipating references listed above.	Each reference is directed to the same problem – applying electrical energy to a target site on a patient's body structure.
Any one or more of 2, 34, 47 with any one or more of the anticipating references listed above.	Fisch reference is directed to the same problem — applying electrical energy to a target site on a patient's body structure.



Attached as Exhibit A are tables showing, for each reference, where the limitations of claim 45 of the '536 patent may be found in the reference.

Smith & Nephew also contends that claim 45 of the '536 patent is invalid for the reasons given in Ethicon's Motion for Summary Judgment of Invalidity for Failure to Satisfy the Requirements of 35 U.S.C. §§ 102-103, Ethicon's Motion for Partial Summary Judgment of Invalidity for Failure to Satisfy the Requirements of 35 U.S.C. § 112, and supporting papers filed in ArthroCare Corp. v. Ethicon, Inc., Case No. C-98-0609 WHO (N.D. Cal.).

2. U.S. Patent No. 5,697,882 ("the 882 patent")

A. Claim 28

Smith & Nephew contends that claim 28 of the '882 patent is anticipated by at least each of the following references: 5, 8, 12, 15, 21, 25, 26, 29, 41, 42, 44, 45, 57, 61, 65.

Smith & Nephew also contends that claim 28 of the "832 patent would have been obvious to one of ordinary skill in the art at the time of the invention in view of at least each of the following combinations of references, which Smith & Nephew contends would have been combined for at least the following reasons:

SOCONBOY . PHYSOR

The '536 Patent	. Reference No. 1
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	*
a high frequency power supply;	Reference No. 1 discloses a high frequency power impoly, see, e.g., col. 1, lines 15-27.
an electrosurgical probe comprising a shaft having a proximal end and a district circl.	Reference No. 1 discloses an electrusurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., col.1, lines 40-55, Fig.1.
an electrode terminal disposed near the distal end, and	Reference No. I discloses an electrode terminal disposed pear the distal end, see, e.g., col. 1, lines 40-55, Fig. 1.
a connector near the proximal end of the shall electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. I discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. I, lines 40-55, Fig. 1.
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 1 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 1, lines 15-27.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	
the electrically conducting fluid generates a current flow path between the return electrode and the electrode reminal.	

	THE FICCULTUM HERERS & THE
The '536 Patent .	Reference No. 2
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	·
a high frequency power supply;	Reference No. 2 discloses a high frequency power supply, see, e.g., p 207.
an electrostagical probe comprising a shaft having a proximal end and a distri end,	
an electrode terminal disposed near the distal end, and	1.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	
s return electrode electrically coupled to the electrosurgical power supply, and	Reference No. 2 discloses a return electrode electrically coupled to the electrostingical power supply, see, e.g., p. 207.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	



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The '536 Patent	Reference No. 3
45. An electromegical system for applying electrical	
energy to a target side on a structure within or on a	
patient's body, the system comprising;	
a high frequency power supply:	Reference No. 3 discloses a high frequency power
	supply, sec, e.g., col. 3, line 48 - col. 4, line 14.
an electrosurgical probe comprising a shaft having a	Reference No. 3 discloses an electrosurgical probe
proximal end and a distal end,	comprising a shaft having a proximal end and a
	distallend, sec, e.g., col. 1, line 18-col. 9, line 8.
an electrode terminal disposed near the distal end,	Reference No. 3 discloses an electrode terminal
and	disposed near the distal end, see, e.g., col. 1, line
	10-col. 9, line 8.
a connector near the proximal end of the shaft	Reference No. 3 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
ejecnounties; bower anbhjā!	electrode terminal to the electrosurgical power
	supply, see, e.g., cal. 8, line 10-cal. 9, line 8,
a return electrode electrically coupled to the	Reference No. 3 discloses a return electrode electrically equiled to the electrosurgical power.
electrosurgical power supply; and	supply, see, e.g., col. 3, line 48 - col. 4, line 14.
an electrically cooducting fluid supply for directing	Reference No. 3 discloses so electrically conducting
electrically conducting fluid to the target site such	fluid supply for directing electrically conducting
that	fluid to the target site, see, e.g., col. 9, lines 9-25,
the electrically conducting fluid generates a current	In Reference No. 3 the electrically conducting fluid
flow path between the return electrocke and the	generates a current flow path between the return
electrode terminal.	electrode and the electrode terminal, see, e.g., col. 9, lines 9:25.

3828780,

	5020 780 ,
The '536 Patent	Reference No. 4
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 4 discloses a high frequency power supply, see, e.g., col. 1, line 5-col. 2, line 2.
an electrosurgical probe comprising a shaft having a proximal end and a distal end.	Reference No. 4 discloses an electrosurgical probe . comprising a shaft having a proximal end and a distal end, see, e.g., col. 1; line 5-col. 2, line 2.
an electrode terminal disposed near the distal end, and	Reference No. 4 discloses an electrode terminal disposed near the distal end, see, e.g., col·1, line 5— col. 2, line 2.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 4 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 1, line 3-col. 2, line 2.
a return electrode electrically coupled to the electrosingical power supply; and	Reference No. 4 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 1, line S—col. 2, line 2.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	
the electrically conducting fluid generales a content flow path between the return electrode and the electrode terminal.	

William The merkinism of The '536 Patrat Beference No. 5 45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising: a high frequency power supply. Reference No. 5 discloses a high frequency power supply, see, e.g., pages 58-60.
Reference No. 5 discloses an ejectrosurgical probe an electrosurgical probe comprising a shall having a comprising a shall having a proximal end and a proximal end and a distal end. distal end, see, e.g., pages 58-60. Reference No. 5 discloses an electrode terminal an electrode terminal disposed near the distal end. disposed near the distal end, see, e.g., pages 58-60. and a connector near the proximal end of the shaft Reference No. 5 discloses a councitor near the electrically coupling the electrode terminal to the proximal end of the shaft electrically coupling the electrosurgical power supply; electrode terminal to the electrosvegical power supply, see, e.g., pages 58-60. Reference No. 5 discloses a return electrode a renna electrode electrically coupled to the electronegical power supply; and electrically coupled to the electrosurgical power supply, see, e.g., pages 58-60. an electrically conducting fluid supply for directing electrically conducting fluid to the target site such the electrically conducting fluid generates a current flow parts between the return electrode and the 3901 742. Reference No. 6 The '536 Patent 45. An electronical cut system for applying electrical energy to a surget site on a structure within or on a patient's body, the system comprising: a high frequency power supply; Reference No. 6 discloses a high frequency power supply, see, e.g., col. 3, lines 3-7.
Reference No. 6 discloses an electrosurgical probe an electrosurgical probe comprising a shaft having a proximal end and a distal end. comprising a shaft having a proximal end and a distal end, see, e.g., col. 3, lines 3-7, Fig. 1-2. Reference No. 6 discloses an electrode terminal an electrode terminal disposed near the distal end. disposed near the distal end, see, e.g., col. 3, lines 3-7, Fig. 1-2.

Reference No. 6 discloses a connector near the a connector near the proximal end of the shaft proximal end of the shaft electrically coupling the electrically coupling the electrode terminal to the electrosurgical power supply; electrode terminal to the electrosurgical power supply see, e.g., col. 3, lines 3-7, Fig 1-2. a return electrode electrically coupled to the Reference No. 6 discloses a return electrode electrosurgical power supply; and electrically coupled to the electrosurgical power supply, sec, e.g., col. 3, lines 3-7, an electrically conducting fluid supply for directing-electrically conducting fluid to the target site such . Ciust the electrically conducting fluid generates a current flow path between the return electrode and the

electrode terminal.

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The '536 Patent	Reference No. 7
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 7 discloses a high frequency power supply, see, e.g., col. 2, lines 44-66.
an electronizgical probe comprising a shaft having a proximal end and a distal end,	Reference No. 7 discloses an electrosurgical probe comprising a that having a proximal end and a distal end, see, e.g., col. 4, lines 4-19; col. 2, lines 4-4-66.
an electrode terminal disposed near the distal end, and	Reference No. 7 discloses an electrode terminal disposed near the distal end, see, e.g., col. 4, fines 4-19; col. 2, lines 44-66.
a connector near the proximal and of the shall electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 7 discloses a connector near the proximal cod of the shaft electrically coupling the electrode returning to the electrosurgical power supply, see, e.g., col. 4, lines 4-19; col. 2, lines 44-66.
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 7 discloses a return electrode electrically coupled to the electrostingical power supply, soe, e.g., col. 2, lines 44-66.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	
the electrically conducting that generates a current flow path between the return electrode and the electrode terminal.	
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	electrode terminal.	
		Ebasserd Kons Article
	The '536 Patent	Reference No. 8
•	45. An electrosurgical system for applying electrical energy to a target side on a structure within or on a patient's body, the system comprising:	
	a high frequency power supply;	Reference No. 8 discloses a high frequency power supply, see, e.g., p. 1.
	an electrosurgical probe comprising a statt baving a proximal end and a distal end,	Reference No. 8 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., p. 3, 7.
i	an electrode terminal disposed near the distal end, and	Reference No. 8 discloses an electrode terminal disposed near the distal end, see, e.g., p. 3, 7.
1	a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electromegical power supply;	Reference No. 8 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., p. 3, 7.
	a return electrode electrically coupled to the . electrosurgical power supply; and	Reference No. 8 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., p. 1.
	an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 8 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, c.g., p. 4-5.
	the electrically conducting field generates a current flow path between the reham electrode and the electrode terminal.	In Reference No. 5 the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g., p. 4- 5.

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The '536 Patent	Reference No. 9
45. An electrosurgical system for applying electrical	
energy to a target site on a structure within or on a	
patient's body, the system comprising:	·
a high frequency power supply.	Reference No. 9 discloses a high frequency power
	supply, sec, e.g., col. 2, lines 33-52.
an electrosurgical probe comprising a shaft having a	Reference No. 9 discloses an electrosurgical probe
proximal end and a distal end	comprising a shaft having a proximal end and a
	distal end, see, e.g., col. 2, lines 40-63.
an electrode terminal disposed near the distal end,	Reference No. 9 discloses an electrode terminal
and	disposed near the distal end, see, e.g., col. 2, lines
	40-63.
a connector near the proximal end of the shaft	Reference No. 9 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrosurgical power supply;	electrods terminal to the electronargical power
	supply, see, e.g., col. 2, lines 40-63, Reference No. 9 discloses a return electrode
a return electrode electrically coupled to the	
eternometers bower supply; said	electrically coupled to the electrosurgical power supply, see, e.g., col. 2, lines 33-52.
an electrically conducting fluid supply for directing	Reference No. 9 discloses an electrically conducting
electrically conducting fluid to the surget site such	fluid supply for directing electrically conducting
that'	fluid to the target site, see, e.g., col. 2, lines 40-63.
the electrically conducting fluid generates a current	In Reference No. 9 the electrically conducting fluid
flow path between the return electrode and the	generates a current flow path between the return
electrode terminal.	electrode and the electrode terminal, see, e.g., col. 2
	lines 40-63.
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The '536 Fatent	Reference No. 10
45. An electrosurgical system for applying electrical	
energy to a target tite on a structure within or on a	1
patient's body, the system comprising:	
a high frequency power supply;	Reference No. 10 discloses a high frequency power
	supply, see, e.g., col. 4, lines 18-28.
an electronizated probe comprising a shaft having a	Reference No. 10 discloses an electrosurgical probe
proximal end and a distal end,	comprising a shall having a proximal end and a
	distal cird, sec, e.g., col. 4, lines 18-28. Reference No. 10 discloses an electrode terminal
an electrode terminal disposed near the disput end.	
and	disposed near the distal end, see, e.g., col 4, lines
	Reference No. 10 discloses a connector near the
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electronizated power supply:	electrode tenninal to the electrosurgical power
exertainisten bawet adabili.	supply, see, e.g., col. 4, lines 18-28.
a return electrode electrically counted to the	Reference No. 10 discloses a return electrode
ejectronatical bower mibbly; and	electrically coupled to the electrosurgical power
enconsultan bours supply, and	supply, see, e.g., col. 4, lines 18-28.
an electrically conducting fluid supply for directing	and hard and and all and all and
electrically conducting fluid to the target site such	



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The '536 Patent	Reference No. 11
45. An electrosurgical system for applying electrical	
energy to a target site on a structure within or on a	· ·
patient's body, the system comprising:	:
a high frequency power supply;	Reference No. 11 discloses a high frequency power
a night acdressed from a subbid.	supply, see, e.g., p. 2.
an electrosuggical probe comprising a shaft having a	Reference No. 11 discloses an electrosurgical probe
proximal end and a distal end.	comprising a shaft having a proximal end and a
	distal cad, see, e.g., p. 2.
an electrode terminal disposed near the distal cod,	Reference No. 11 discloses an electrode terminal
and	disposed near the distal end, see, e.g., p. 2.
a connector near the preximal end of the shaft	Reference No. 11 discloses a connector pour the
electrically coupling the electrode terminal to the .	proximal end of the shaft electrically coupling the
electrosurgical power supply;	electrode terminal to the electrosurgical power
• • • • • • • • • • • • • • • • • • • •	supply, soc, e.g., p. 2.
a return electrode electrically coupled to the	Reference No. 11 discloses a return electrode
ciceresurgical power supply; and	electrically coupled to the electrosurgical power
•	supply, see, e.g., p. 2.
an electrically conducting fand supply for directing	
electrically conducting fluid to the target site such	
that	
the electrically conducting fluid generates a current	. : 7
flow path between the return electrode and the	
electrode terminal.	
	Picrcen estal article.
The '536 Patent	Picce Est al article Reforence No. 12
45. An electrosargical system for applying electrical	
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a	
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	Reference No. 12
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a	Reference No. 12 disclores a high frequency power
45. An electrostrated system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising: a high frequency power supply:	Reference No. 12 Reference No. 12 discloses a high frequency power supply, see, c.g., p. 528.
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising: a high frequency power supply; an electrosurgical probe comprising a shaft having a	Reference No. 12 Reference No. 12 discloses a high frequency power supply, see, e.g., p. 528. Reference No. 12 discloses an electrosurgical probe
45. An electrostrated system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising: a high frequency power supply:	Reference No. 12 Reference No. 12 discloses a high frequency power apply, see, e.g., p. 524. Reference No. 12 discloses an electrosurgical probe comprising a shall having a proximal end and a
43. An cicerosangical system for applying electrical corry to a target size on a structure within or on a patients body, the system comprising: a bigh frequency power supply: an electrosurgical probe comprising a shall be ving a proximal end and a distal end.	Reference No. 12 discloses a high frequency power apply, see, e.g., p. 528. Reference No. 12 discloses an electrosurgical probe comprising a sharfl having a proximal end and a distill end, e.g., p. 530.
43. An electrosurgical system for applying clearinal courgy to a larget size an a students within or on a patient's body, the system comprising: a light frequency power supply; an electrosurgical probe comprising a shaft having a proximal end and a distail end, an electrosurgical forms of the students of the stude	Reference No. 12 Reference No. 12 discloses a high frequency power apply, see, e.g., p. 524. Reference No. 12 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal
43. An electrosurgical system for applying circitical concept (to a target size on a structure width or on a patient's body, the system comprising: an electrosurgical probe comprising a shalf having a proximal end and a distal end, no electrode terminal disposed near the distal end, and	Reference No. 12 discloses a high frequency power supply, see, e.g., p. 528. Reference No. 12 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposited near the distal end, see, e.g., p. 530.
43. An electrosurgical system for applying electrical compy to a target site on a structure within or on a patient's body, the system comprising: a high frequency power supply: an electrosurgical probe comprising a shall having a proximal end and a distal end, and have been supply to the shall shall be a connector tear the given and of the shall end.	Reference No. 12 dicloses a high frequency power ropply, see, e.g., p. 224. Reference No. 12 dicloses a high frequency power ropply, see, e.g., p. 224. Reference No. 12 dicloses an electrosurgical probe comprising a shall having a proximal end and a distal end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the distal end, see, e.g., p. 530. Reference No. 12 discloses a connector near the
43. An electrosurgical system for applying circitical concept (to a target size on a structure within or on a patient's foody, the system comprising: an electrosurgical probe comprising a shaft having a proximal end and a distal end, no electrose terminal disposed near the distal end, no electrose terminal disposed near the distal end, no energy the system of the proximal end of the shaft electrically compling the electrose terminal in the	Reference No. 12 discloses a high frequency power supply, see e.g., p. 528. Reference No. 12 discloses an electrosurgical probe comprising a shaft having a proximal end and a district end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposited near the district end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposited near the district end, see, e.g., p. 530. Reference No. 12 discloses a contector near the proximal end of the shaft electrically coupling the
43. An electrosurgical system for applying electrical compy to a target site on a structure within or on a patient's body, the system comprising: a high frequency power supply: an electrosurgical probe comprising a shall having a proximal end and a distal end, and have been supply to the shall shall be a connector tear the given and of the shall end.	Reference No. 12 discloses a high frequency power nupply, see, e.g., p. 224. Reference No. 12 discloses an electrosurgical probe competing a shall having a proximal end and a district end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal dispoint of new fee district end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal dispoint one the district end, see, e.g., p. 530. Reference No. 12 discloses a connector near the proximal end of the shall electrically coupling the electrode terminal to the electrosurgical power
43. An electrosurgical system for applying electrical course you a taset site on a structure within or on a patients tody, the system comprising: a bigh frequency power supply? an electrosurgical probe comprising a shaft having a proximal end and a distal end, and electrosurgical probe comprising a shaft having a no electrosurgical proximal disposed near the distal end, and electrosurgical proximal end of the shaft electrically configure the electrosurgical power supply:	Reference No. 12 discloses a high frequency power supply, see, e.g., p. 524. Reference No. 12 discloses an electrosurgical probe competing a shaft having a proximal end and a distal end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal dispoted for the characteristic of the competing a shaft having a proximal end and dispoted free the chall end, see, e.g., p. 530 the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., p. 530.
43. An electrosurgical system for applying electrical compy to a target site on a structure within or on a reason you are site for our comprising. a high frequency power supply: an electrosurgical probe comprising a shall having a proximal end and a distal end, an electrosurgical probe comprising a shall having a proximal end and a distal end, an electrosurgical probe comprising a shall having a consector near the proximal end of the shall electrically coupling the electrosurgical power supply; a return electrode electrically coupled to the	Reference No. 12 dicloses a high frequency power napply, see, e.g., p. 224. Reference No. 12 dicloses a high frequency power napply, see, e.g., p. 224. Reference No. 12 dicloses an electrosurgical probe comprising a shall having a proximal end and a distal end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the distal end, see, e.g., p. 530. Reference No. 12 discloses a neonector near the proximal end of the shall electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., p. 530. Reference No. 12 discloses a reason electrode
43. An electrosurgical system for applying electrical course you a taset site on a structure within or on a patients tody, the system comprising: a bigh frequency power supply? an electrosurgical probe comprising a shaft having a proximal end and a distal end, and electrosurgical probe comprising a shaft having a no electrosurgical proximal disposed near the distal end, and electrosurgical proximal end of the shaft electrically configure the electrosurgical power supply:	Reference No. 12 discloses a high frequency power supply, see, e.g., p. 528. Reference No. 12 discloses an electrosurgical probe comprising a shaft having a proximal end and a distral end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the distal end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the distal end, see, e.g., p. 530. Reference No. 12 discloses a reconstruit near the electrode terminal to the electrosurgical power supply, see, e.g., p. 530. Reference No. 12 discloses a recum electrode electrosity power supply see, e.g., p. 530.
43. An electrosurgical system for applying electrical compy to a target site on a structure within or on a patients tody, the system comprising: a high frequency power supply: an electrosurgical probe comprising: an electrosurgical probe comprising a shall having a proximal end and a distal end, an electrosurgical probe comprising a shall having a necessary of the shall comprise the proximal end of the shall electrosurgical power supply; a return electrosurgical provides terminal to the electrosurgical power supply; a return electrode electrically complete to the electrosurgical power supply;	Reference No. 12 dicloses a high frequency power napply, see, e.g., p. 224. Reference No. 12 dicloses a high frequency power napply, see, e.g., p. 224. Reference No. 12 dicloses an electrosurgical probe competing a shat having a proximal end and a distal end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal dispoint near the distal end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal dispoint near the proximal end of the shat electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., p. 530. Reference No. 12 discloses a return electrode effectivelly coupled to the electrosurgical power supply, see, e.g., p. 530.
4.5. An electrosurgical system for applying electrical corpy to a target site on a structure within or on a patients tody, the system comprising: a bigh frequency power supply; an electrosurgical probe comprising a shaft having a proximal end and a distal empression of the shaft electrically coupling the electrode terminal disposed near the distal end, and electrode terminal proximal end of the shaft electrically coupling the electrode terminal to the electrically coupled terminal to the electrosurgical power supply; a pressure electrode electrically coupled to the electrosurgical power supply.	Reference No. 12 discloses a high frequency power apply, see, e.g., p. 528. Reference No. 12 discloses an electrosurgical probe competing a shart having a proximal end and a distral end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the distal end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the distal end, see, e.g., p. 530. Reference No. 12 discloses a countriestor near the proximal end of the shaft electrically coupling the end of the shaft electrically coupling the electrode state of the shaft electrically coupled to the electrosurgical power supply, see, e.g., p. 528. Reference No. 12 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., p. 528.
45. An electrosurgical system for applying electrical coursy to a target site on a structure within or on a patients tody, the system comprising: a high frequency power supply: an electrosurgical probe comprising: an electrosurgical probe comprising a shall having a proximal end and a distal end, an electrosurgical probe comprising a shall having a proximal end as distal end, an electrosurgical probe comprising a shall having a consector near the proximal end of the shall a consector near the proximal end of the shall a consector near the proximal end of the shall a consector near the proximal end of the shall be electrosurgical power supply; a return electrode electrically complete to the electrosurgical power supply; and an electrically conducting fluid supply for directing electrically conducting fluid supply for directing	Reference No. 12 discloses a high frequency power mapply, see, e.g., p. 224. Reference No. 12 discloses an electrosurgical probe comprising a shart having a proximal end and a distal cad, see, e.g., p. 530. Reference No. 12 discloses an electrode traveluia disjoid near the distal end, see, e.g., p. 530. Reference No. 12 discloses an electrode traveluia disjoid near the distal end, see, e.g., p. 530. Reference No. 12 discloses a counceron near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., p. 530. Reference No. 12 discloses a renam electrode electrically coupled to the electrosurgical power supply, see, e.g., p. 524. Reference No. 12 discloses an electrically conducting fluid supply fee, e.g., p. 524.
43. An electrosurgical system for applying electrical course you is target size on a structure within or on a patients tody, the system comprising: a high frequency power supply; an electrosurgical probe comprising a shaft having a proximal end and a distal end, an electroduc terminal disposed near the distal end, and someoctor sizes the proximal end of the shaft electrically compling the electroduce terminal to the electrically compling the electroduce terminal to the electrosurgical power supply; a return electrode electrically complete to the electrosurgical power supply and the electrosurgical power supply for direction and electrosurgical power supply for directing electrically conducting fluid supply for directing electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 12 discloses a high frequency power supply, see, e.g., p. 528. Reference No. 12 discloses an electrosurgical probe competing a shart having a proximal end and a district end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the district end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the district end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the district end, see, e.g., p. 530. Reference No. 12 discloses an examption power supply, see, e.g., p. 524. Reference No. 12 discloses an exame electrode factorically complete to the electrosurgical power supply, see, e.g., p. 524. Reference No. 12 discloses an electrically conducting fluid supply for directing electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., p. 539.
43. An electrosurgical system for applying electrical coursy to a target site on a structure within or on a patient's body, the system comprising: a high frequency power supply: an electrosurgical probe comprising: an electrosurgical probe comprising a shall having a proximal end and a distal end, an electrosurgical probe comprising a shall having a proximal end and electrosity coupled terminal disposed near the distal end, an electrosurgical power supply; a return electrode electrically complet to the electrosurgical power supply; an electrically completed problem of the electrosurgical power supply; an electrically conducting fluid supply for directing electrically conducting fluid to the target airs such that	Reference No. 12 discloses a high frequency power pupply, see, e.g., p. 224. Reference No. 12 discloses an electrosurgical probe comprising a shart having a proximal end and a distal cad, see, e.g., p. 530. Reference No. 12 discloses an electrode traveluid dispoind near the distal end, see, e.g., p. 530. Reference No. 12 discloses an electrode traveluid dispoind near the distal end, see, e.g., p. 530. Reference No. 12 discloses a counceron near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., p. 530. Reference No. 12 discloses a renam electrode electrically coupled to the electrosurgical power supply, see, e.g., p. 524. Reference No. 12 discloses a clearinestly conducting fluid to the target site, see, e.g., p. 539. Reference No. 12 discloses an electrically conducting fluid to the target site, see, e.g., p. 539.
43. An electrosurgical system for applying electrical course you is target size on a structure within or on a patients tody, the system comprising: a high frequency power supply; an electrosurgical probe comprising a shaft having a proximal end and a distal end, an electroduc terminal disposed near the distal end, and someoctor sizes the proximal end of the shaft electrically compling the electroduce terminal to the electrically compling the electroduce terminal to the electrosurgical power supply; a return electrode electrically complete to the electrosurgical power supply and the electrosurgical power supply for direction and electrosurgical power supply for directing electrically conducting fluid supply for directing electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 12 discloses a high frequency power supply, see, e.g., p. 528. Reference No. 12 discloses an electrosurgical probe competing a shart having a proximal end and a district end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the district end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the district end, see, e.g., p. 530. Reference No. 12 discloses an electrode terminal disposed near the district end, see, e.g., p. 530. Reference No. 12 discloses an examption power supply, see, e.g., p. 524. Reference No. 12 discloses an exame electrode factorically complete to the electrosurgical power supply, see, e.g., p. 524. Reference No. 12 discloses an electrically conducting fluid supply for directing electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., p. 539.

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The '536 Patent	Reference No. 13
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No: 13 discloses a high frequency power supply, see, e.g., cal. 4, line 15; col 7, lines 38-50.
an electrosurgical probe compassing a shaft having a proximal end and a distal end.	Reference No. 13 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., col. 6, lines 55-70.
an electrode terminal disposed near the distal end, and	Reference No. 13 discloses so electrode terminal disposed near the distal end, see, e.g., col. 6, knes 55-70.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electroducyical power supply;	Reference No. 13 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 6, lines 55-70.
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 13 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 4, line 15; col. 7, lines 38-50.
an electrically conducting fluid supply for directing electrically conducting fluid to the target size such that	
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	
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The '536 Patent	Reference No. 15
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 15 discloses a high frequency power supply, see, e.g., col. 1, lines 5-17.
an electrosurgical probe comprising a shaft having a proximal end and a distal end,	Reference No. 15 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., col. 4, line 51-col. 5, line 20.
an electrode terminal disposed near the distal and, and	Reference No. 15 discloses an electrode terminal disposed near the distal end, see, e.g., col. 4, line 51-col. 5, line 20.
a connector near the pruximal ead of the shaft electrically coupling the electrode terminal to the electrosurgical power supply:	Reference No. 15 discloses a connector near the pruximal end of the shaft electrically coupling the electrode priminal to the electrosegueal power supply, see, e.g., col. 4, line 51-col. 5, line 20.
a return electrode electrically coupled to the	Reference No. 15 discloses a return electrode

electrode tenninal

electrosurgical power supply; and

an electrically conducting fluid supply for directing electrically conducting fluid to the target site such

the electrically conducting fluid generates a current

flow path between the return electrode and the

electrically coupled to the electrosurgical power supply, see, e.g., col. 1, lines 5-17.
Reference No. 15 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., col. 1,

lines 52-56; col. 7, lines 59-62. In Reference No. 15 the electrically conducting

col. 1, force 52-56; col. 7, lines 59-62.

fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g.,

	hennis etal.
The '536 Patent	. Reference No. 16
45. An electrosusgical system for applying electrical energy to a target sits on a structure within or on a patient's body, the system comprising:	
a high frequency power supply:	Reference No. 16 discloses a high frequency power supply, see, e.g., pp. 845-46.
an electrosurgical probe comprising, a shaft having a proximal and and a distal and,	Reference No. 16 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., p. 145.
an electrode terminal disposed near the discal end, and	Reference No. 16 discloses an electrode terminal disposed near the distal end, see, e.g., p. 845,
a connector near the preximal end of the shaft electrically coupling the electrode terminal to the electrostrgical power supply;	Reference No. 16 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, sec. e.g., p. 845.
a rentra electrode electrically coupled to the electrosurgical power supply; and	Reference No. 16 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., pp. 845-46.
an electrically conducting finid supply for directing electrically conducting fluid to the target size such that	Reference No. 16 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., p. 846.
the electrically conducting fluid generates a current flow path between the return electrode and the electrode tenuinal.	In Reference No. 16 the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal, ace, e.g., p. 846.

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The '536 Patent .	Reference No. 17
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 17 discloses a high frequency power supply, see, e.g., col. 6, lines 1-30.
an electrosurgical probe comprising a shaft having a proximal end and a distal end.	comprising a shaft baying a proximal end and a distal end, see, e.g., col. 6, lines 1-30.
an electrode terminal disposed near the distal end, and	Reference No. 17 discloses an electrode terminal disposed near the distal end, soe, e.g., col. 6, lines 1- 30.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 17 discloses a connector near the proximal end of the shall electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 6, lines 1-30.
a return electrode electrically coupled to the electronurgical power supply; and	Reference No. 17 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 6, lines 1-30.
an electrically conducting fluid supply for directing electrically conducting fluid to the larget site such that	
the electrically conducting fluid generales a current flow path between the return electrode and the electrode terminal.	



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Reference No. 18
Reference No. 13 discloses a high frequency power supply, see, e.g., col. 1, lines 12-37.
Reference No. 18 discloses an electroningle i probe comprising a shift having a proximal end and a distal end, see, e.g., col. 1, lines 12-37.
Reference No. 11 discloses on electrode terminal disposed near the distal and, see, e.g., col. 1. lines 12-37.
Reference No. 11 discloses a connector near the proximal end of the shaft electrically coupling the electrosurgical power supply, see, e.g., end. 1, lines 12-37.
Reference No. 11 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.e., col. 1, lines 12-37.
Reference No. 11 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., and 3. line 67 - col. 4, line 3.
in Reference No. 13 the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g., cal. 3, lina 67 – col. 4, line 3.

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The *536 Patent	Reference No. 19
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 19 discloses a high frequency power supply, see, e.g., col. 2, lines 33-46.
an electrosurgical probe comprising a shaft having a proximal end and a distal end,	Reference No. 19 discloses an electrosurgical probe- comprising a shaft having a pruximal end and a distal end, see, e.g., col. 2; lines 33-46.
an electrode terminal disposed near the distal end, and	Reference No. 19 discloses an electrode terminal disposed near the distal end, see, e.g., col. 2, lines 33-46.
a connector near the proximal end of the shaft electrically coupling the electrods terminal to the electrosurgical power supply;	Reference No. 19 discloses a connector near the proximal and of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., cot 2, lines 33-46.
a setura electrode electrically coupled to the electrosurgical power supply; and	Reference No. 19 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 2, lines 33-46.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 19 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the larget site, see, e.g., col. ! [ines 34-38].
the electrically conducting fluid generates a current flow path between the return electrode and the	Ja Reference No. 19 the electrically conducting fluid generates a current flow path between the

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electrode terminal.	return electrode and the electrode terminal, see, e.g., col. 1, lines 34-38.	
	4248231	
The '536 Patent	Reference No. 20	
45. An electrosurgical system for applying electrical		
energy to a target site on a structure within or on a		
patient's body, the system comprising:		
a high frequency power supply;	Reference No. 20 discloses a high frequency power	
	supply, see, e.g., col. 2, lines 35-58.	
an electrosurgical probe comprising a shaft having a	Reference No. 20 discloses an electrosorgical probe	
proximal end and a distal and,	comprising a shaft having a proximal end and a	
	distal end, see, e.g., col. 2, lines 35-58.	
an electrode terminal disposed near the distal end,	Reference No. 20discloses an electrode terminal	
*od	disposed near the distal end, see, e.g., col. 2, lines	
	35-58.	
a connector near the proximal end of the shaft	Reference No. 20 discloses a connector near the	
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the	
electrosurgical power supply:	electrode terminal to the electromagical power	
	supply, see, e.g., col. 2, lines 35-58.	
a return electrode electrically coupled to the	Reference No. 20 discloses a return electrode	
electrosurgical power supply; and	electrically coupled to the electrosurgical power	
	supply, see, e.g., col. 2, lines 35-58. Reference No. 20 distloses an electrically	
an electrically conducting fluid supply for directing -		
electrically conducting fluid to the target site such that	conducting fluid supply for directing electrically	
C.M.	conducting fluid to the target site, see, e.g., col. 2, lines 35-58.	
the electrically conducting fluid generates a current	In Reference No. 20 the electrically conducting	
flow path between the return electrode and the	Build generates a current flow path between the	
electrode terminal.	return electrode and the electrods terminal, see, e.g.	
Control of the contro	col. 2, lines 35-58.	
· , · · · · · · · · · · · · · · · · · ·	Barren etal	
The '536 Patent	Reference No. 21	
45. An electrosurgical system for applying electrical .		
energy to a farget site on a structure within or on a		
patient's body, the system comprising:		
a high frequency power supply:	Reference No. 21 discloses a high frequency power	
	supply, see, e.g., p. 333.	
an electrosurgical probe comprising a shaft having a	Reference No. 21 discloses an electrosurgical probe	
proximal cod and a distal end,	comprising a shaft having a proximal end and a	
	distal end, see, e.g., p. 333.	
an electrode terminal disposed near the distal end,	Reference No. 21 discloses an electrode terminal .	
and .	disposed near the distal end, see, e.g., p. 333.	
connector near the proximal end of the shaft	Reference No. 21 discloses a connector near the	
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the	
electronugical power supply;	electrode terminal to the electrosurgical power	
	supply, see, e.g., p. 333.	
return electrode electrically coupled to the	Reference No. 21 discloses a return electrode	
electrosurgical power supply; and	electrically coupled to the electrosurgical power	
	supply, see, e.g., p. 333.	
in electrically conducting fluid supply for directing	Reference No. 21 discloses an electrically :	
localically conducting fluid to the target site such	conducting fluid supply for directing electrically	
hag.	cooducting fluid to the target site, see, e.g., p. 334.	
he electrically conducting fluid generates a current	In Reference No. 21 the electrically conducting	
low path between the return electrode and the	fluid generates a current flow path between the	

electrode terminal.	return electrode and the electrode terminal, see, e.g., p. 334.
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The '536 Patent	Reference No. 22
45. An electrosurgical system for applying electrical	
cocrey to a target site on a structure within or on a	1.
patient's body, the system commissing:	
a high frequency power supply;	Reference No. 22 discloses a high frequency power, supply, see, e.g., col. 2, lines 21-58.
an electrosurgical probe comprising a shaft having a	Reference No. 22 discloses an electrosurgical media
proximal end and a discal end.	comprising a shaft having a proximal end and a
	distal end, sec, e.g., col. 2, lines 21-58.
an electrode terminal disposed near the distal end,	Reference No. 22 discloses an electrode terminal
and .	disposed near the distal end, see, e.g., col. 2, lines 21-58.
a connector near the proximal end of the shaft	Reference No. 21 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrosurgical power supply;	electrode terminal to the electrosurgical power
	supply, see, e.g., col. 2, lines 21-58.
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 22 discloses a return electrode electrocally coupled to the electrosurgical power
electrosurgical power supply; and	supply, see, e.g., col. 2, lines 21-58.
an electrically conducting fluid supply for directing	Reference No. 22 discloses an electrically
electrically conducting fluid to the target site such	conducting field supply for directing electrically
that	conducting fluid to the target site, see, e.g., col. 2.
* * *	lines 21-58.
the electrically conducting fluid generates a current	In Reference No. 22 the electrically conducting
flow path between the return electrode and the	fluid generates a current flow path between the
electrode terminal,	return electrode and the electrode terminal, see, e.g.,
	col. 2, lines 21-58.
	4381.007
The '536 Patent	Reference No. 23
45. An electrosurgical system for applying electrical	
energy to a target site on a structure within or on a	
patient's body, the system comprising: a high frequency power supply:	Reference No. 23 discloses a high frequency power
a miles medicared bower amblità.	supply, see, e.g., col: 2, lines 42-68; cal. 3, lines 24-
	38.
an electrosurgical probe comprising a shall beying a	Reference No. 23 discloses an electrosurgical proper
proximal end and a distal and,	comprising a shaft having a proximal end and a
	distal end, see, e.g., col. 2, lines 42-68; col. 3, lines
	34-38.
an electrode terminal disposed near the distrit end,	Reference No. 23 discloses an electrode termine!
and	disposed near the distal end, see, e.g., col. 2, line
	42-68; cal. 3, lines 34-38.
a connector near the proximal end of the shaft	Reference No. 23 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrostrgical power supply;	electende leavant to the electrosurgical power
	supply, see, e.g., col. 2, lines 42-68; col. 3, lines 34
a return electrode electrically coupled to the	Reference No. 23 discloses a return electrode
electrosus ical power supply; and	electrically coupled to the electrosurgical power
electrosurgical power supply; and	electrically coupled to the electrosurgical power supply, see, e.g., col. 2, lines 42-68; col. 3, lines 34-

an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 23 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., col. 2, lines 42-61; col. 3, line 66.
the electrically conducting fluid generates a nurrent flow path between the return electrode and the electrode terminal.	In Reference No. 23 the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g., col. 2, lines 42-68; col. 3, lines 34-38.
	Swain etal.
The '536 Patent	Reference No. 24

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The '536 Patent	Reference No. 24
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 24 discloses a high frequency power supply, see, e.g., p. 1425.
an electrosurgical probe comprising a shad having a proximal end and a distal end,	Reference No. 24 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., p. 1425.
an electrode terminal disposed near the distal end, and	Reference No. 24 discloses an electrode terminal disposed near the distal end, see, e.g., p. 1425.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 24 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., p. 1425.
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 24 direleases a return electrode electrically coupled to the electrosurgical power supply, see, e.g., p. 1425.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 24 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., p. 1425.
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	in Reference No. 24 the electrically conducting thing generates a current flow path between the renum electrode and the electrode terminal, see, e.g., p. 1425.
	Man sam et al
The '536 Patent	Reference No. 25
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 25 discloses a high frequency power supply, see, e.g., p. 99.
an electrosurgical probe comprising a shall having a proximal end and a direct end,	Reference No. 25 discloses an electrosurgical probe comprising a shaft having a proximal end and a

45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising.	
a high frequency power supply;	Reference No. 25 discloses a high frequency power supply, see, e.g., p. 99.
an electrosurgical probe comprising a shall having a proximal end and a direct end,	Reference No. 25 discloses an electrosingical probe comprising a shaft having a proximal end and a distal end, see, e.g., p. 99.
an electrode terminal disposed a ear the distal end, and	Reference No. 25 discloses an electrode terminal disposed near the distal end, see, e.g., p. 99.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 25 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., p. 99.
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 25 discloses a renum electrode electrically coupled to the electrosurgical power supply, see, e.g., p. 99.
an electrically conducting fluid supply for directing .	Reference No. 25 discloses an electrically

conducting fluid to the target size, see, e.g., p. 93. In the grain between the return electrodes and the electrode terminal between the return electrodes and the electrode terminal between the return electrodes and the electrode terminal. The '536 Patent 43. An electromagical pytical for applying electrical energy to a larget size on a structure within or on a publical body and between the return electrode and the electrode terminal, see, e.g., p. 93. The '536 Patent 43. An electromagical pytical for applying electrical energy to a larget size on a structure within or on a publical body and the electrode terminal electrode and the electrode terminal electrodes and the electrode terminal of the electrode terminal disposed part the district each electrode terminal the electrode terminal to the electrode terminal to the electrode terminal the electrode terminal to the electrode terminal part the electrode terminal to the electrode terminal part the electrode terminal to the electrode terminal part the electrode terminal part to the target the electrode terminal to the el		
that the electrically conducting floid generales 3 current like electrically conducting floid generales 3 current like electrically conducting floid generales 3 current like electrically conducting floid generales 4 current like electrically conducting floid generales 4 current like electrically conducting floid generales 4 current like electrically conducting floid generales a flow flower supply; and electrode ferminal seed a flore electrode from floid generales a flower flower supply; are electrode from floid generales a flower flower flower supply; and electrode ferminal. 45. As electromagnical system for applying electrical success flower papely. 45. As electromagnical system for applying electrical success flower supply; and electrode from floid general system for a supply, see, e.g., p. 1331. 46. As electromagnical production general special standard flower supply; and electrically conducting floid generales a success flower supply; are electrode electrically conducting floid generales a success flower supply; and electrically conducting floid generales a success flower supply; and electrically conducting floid generales a success flower supply; and electrode ferminal. 45. As electromagnical power supply; and electrode from floid generales a success flower supply; and electrode from floid generales a success flower supply; and electrode from floid generales a success flower flower supply; and electrode from floid generales a success flower flower supply; and electrode from floid generales a success flower flower supply; and electrode from floid generales a success flower flower flower supply; and electrode from floid generales a success flower flower flower supply; and electrode from floid generales a success flower flower flower supply; and electrode from flower supply; and electrode from floid generales a success flower flower flower supply; and electrode from flowe	electrically conducting fleid to the target site such	conducting fluid supply for directing electrically
their generates a curtact flow push between the relative control. The 'S.56 Patent	thesi	conducting third to the target sac, see, e.g., p. 55.
flow puth between the return electrode and the electrode terminal. The *536 Patent The *5	the electrically conducting fluid generales a current	in Reference No. 35 the electricity conducting
electrode terminal. The '\$36 P atent The '\$36 P atent The '\$36 P atent Reference No. 26 Reference No. 27 Reference	flow with between the return electrode and the	fluid generates a current flow pain between the
The "\$36 P a tent 45. An electromargical system for applying electrical energy to a larget site on a structure within or to a product to they designed to the structure within or to a larget site on a structure within or to a larget site on a structure within or to a larget site on a structure within or to a larget site on a structure within or to a larget site on a structure within or to a larget site on a structure within or to a larget site on a structure within or to a larget site on a structure within or to a larget site of a larget site of site of six	alasmada terminal	
65. An elementary in process of spring elements of the process of the product shoot, the system comprising a start having a process of the product shoot, the system comprising a shall having a supply as a comprising a shall having a product shoot, the system comprising a shall having a supply as a comprising a shall having a product shoot, the system comprising a shall having a product shoot, the shall desire the	EIELA OOC AUTOMON.	p. 99.
45. An electromagnical system for applying electrical energy for a bright frequency power applying electrical power and a system of a physical energy as a bright for one a transportation or not a state of the production of the shall form of the shall form of the shall electrically complied the electromagnical power anapphy and electromagnical power anapphy; asset, e.g., p. 1331. The *335 Fastent* 45. As electromagnical power anapphy; as elect		Slaveretal
45. An electromagnical protect not supplying electrical energy to a largest size on a structure within or on a patients body, the system comprising: an electronerpical probe comprising a shall having a proximated and a ship homeous power supply; an electronerpical probe comprising a shall having a proximated and and a district end, and the electrically complied the electrone for the shall electrically complied to the electronerpical proves supply; a return electrone el	The 1536 Patent	Reference No. 26
seargy to a larget site on a structure within or on a productive body, the system comprising a halfs brownery power supply. **Reference No. 26 disclasses a high frequency power supply.** **Reference No. 26 disclasses a nicertomargical probe comparising a shaft having a proximal cod and a distrate of a disclasses an electromargical probe comparising a shaft having a proximal cod and a distrate of a disclasses of the shaft having a proximal cod and a distrate of a consideration of the shaft of consideration products to the construction of the shaft of consideration of t		
patients body, the system comprising a shall having a special content of the shall decreasely provided and an experimental country of the shall decrease the proximal and on the dentel end, and the shall decrease the proximal and of the shall decrease the proximal and shall decrease the proximal and shall decreased the shall decrease the proximal and shall decrease the proximal and shall decreased the shall decrease the proximal and of the shall decrease the proximal and shall decreased the shall decrease the proximal and the decrease the proximal and the decrease the proximal and the shall decreased the shall decrease the proximal and the decrease the proximal and the decrease the proximal and the shall decrease the proximal and of the shall decrease the proximal and of the shall decrease the proximal and the shall decrease the proximal	45. An electrosurgical system for applying circulate	
a high shopmort power supply. A concerning color of the shall be described to the characteristic posterior of the shall be described to the characteristic posterior of the shall be described to the characteristic posterior of the shall be described to the characteristic posterior of t	energy, to a triber and no a sunctime Assess or on a	
angular option of process appears in a staff having a proximal and and a distral end, and a staff having a proximal and and a distral end, and a staff having a proximal and and a distral end, and a staff having a proximal and and a distral end, and a staff having a proximal and and a distral end, and a staff having a proximal end and a distral end, and a staff having a proximal end of the shaff having a proximal end of the shaff and a contractive proximal process and a staff having a proximal end of the shaff and a contractive proximal process and a contractive proximal process and a contractive proximal process and the contractive proximal proximal process and the contractive proximal process and the contractive proximal pr	patient's body, the system comprising.	Waterpass No. 76 discloses a high formancy power.
the deterministical public competing a shall having a production and and a formation and an algorithm of the district of the promission of and a fairth end, and described terministic flow public complete the clear of the shall described the production of the shall described the shall describe the shall described the shall describe the shall des	a high troquency power supply;	
comprising a shall having a proximal and and a direct more and a section of the shall have been a proximal and and a direct more and a section of the shall have been a shall have been a proximal and and a direct more and a section of the shall be considered by the		supply, see, e.g., p. 1343,
comparing a sea to require processing a sea of the comparing a sea to require processing a sea of the comparing a	an electrosurgical probe comprising a shaft having a	Reference No. 26 discloses an electrosurgical probe
an electrode terminal disponed pear the distal end, and the consecute near the proximal rand of the shall be consecute near the proximal rand of the shall be consecute near the proximal rand of the shall be consecute near the proximal rand of the shall be consecuted the consecute near the received by complete the electrode terminal to the chectmonaryis pear supply; and the chectmonaryis pear supply; and the chectmonaryis pear to expect the chectmonaryis pear to expect the chectmonaryis pear to expect the chectmonary to the chectmonary to endure the pear to the chectmonary to the chectmonary to endure the received the chectmonary to the chectmonary to the chectmonary to the chectmonary to the shall be chectmonary to the struct of the the struct	mornismal and and a distral and.	compening a shaft having a proximal end and a
figured for the detail end, see, e.g., p. 1343. For the system comprised prover supply; and the chemically complied the chemically complied the chemical for t	•	distal end, soc. e.g., p. 1383.
figured for the detail end, see, e.g., p. 1343. For the system comprised prover supply; and the chemically complied the chemically complied the chemical for t	and district and district and	Reference No. 26 discloses an electrode terminal
The "356 Patent G. As electronically conflict on a structure within or on a lectronically complied and difficult within or on a lectronically complied as distill conflict on a structure within or on a lectronical power supply; and a cleared of conflict of a lectronical power supply and the clear supply and structure within the clear supply and structure of the conflict of the clear supply and structure of the clear supply and structure of the clear supply and structure of the clear supply conducting fluid a peoply for discounts and clear supply conducting fluid a peoply as for each power supply. The "356 Patent of the clear supply and structure of the shall be considered and structure of the clear supply and structure of the shall be considered as a structure of the sha	an electrone (cultural malvaces have one mites end	dimograf pear the distal end, acc. c.c., p. 1383.
extendingly complies the electronic terminal to the decremous trapply and the chromous plan power supply; and the chromous plan power supply and the chromou	and	Beforence No. 26 discloses a connector pear the
detention from the program of the shall consider the method terminal to the electronary power supply. A finite detention of the program of the detention of the program of the electronary power supply and the electronary power supply to the electronary power supply to the electronary power supply and the electronary power supply and the electronary power supply and power supply and electronary power supply and	a connector near the proximal end of the apair	provinced and of the shaft electrically contains the
apply, see, e.g., p. 133. apply, see, e.g., p. 134. apply, see, e.g., p. 134. an electrostical proteins fluids supply for directions of electrostical proteins fluid supply for directions fluid supply for electrical proteins fluid	electrically coupling the electrode terminal to the	at-torde terminal to the electrosurrical cower
A retiract chemical electrically coupled to the characteristic power supply. and chemically conducting fluid a supply for discious, and chemically conducting fluid in the truget site such as the controlly conducting fluid in the truget site such as the controlly conducting fluid in the truget site as untreat fluid extends from similar to the controlly conducting fluid or the reversible controlly conducting fluid controlly as the supply of the controlly conducting fluid controlly conduction fluid controlly conducting fluid controlly conduction fluid controlly conducting fluid controlly conduction fluid controlly conduction fluid controlly conducting fluid controlly conduction fluid con	electrosurgical power supply;	electrone scientists in our electron first hours
ciconically conducting fluids anyphy for directing the controlled producting pluids anyphy for directing directions and controlly conducting fluid as the truct tiles used that the controlly conducting fluid is the truct tiles used that the controlly conducting fluid is the truct tiles used that the controlly conducting fluid is first to the controlly conducting fluid in first tiles as the controlly conducting fluid in first tiles as the electrode forminal. The '336 Partent The '336 Partent The '336 Partent G. An electrous play price comprising a shall having a partent looky, the system comprising a shall having a partent looky, the system comprising a shall having a partent looky, the system comprising a shall having a partent looky that the controlled provided terminal disposed near the diast end, and electrous terminal the provincial controlled provincial controlled provincial terminal tiles are the provincial terminal to the electrous play provincial control of the shall electronically coupling the electrous play provincial control of the shall electronically coupling the electrous play provincial control of the shall electronically coupling the electrous play provincial control of the shall electronically coupling the electrous play provincial control of the shall electronically coupling the electrous play provincial control of the shall electronically coupling the electronic play apperly for directing the player of the control of the shall electronically coupling the electronic play apperly for directing the power supply; and a referrically conducting that apperly for directing the supply for d		supply, see, e.g., p. 1363.
the controlled power supply and the controlled power supply an	a prison cleanede electrically coupled to the	Reference No. 26 discloses a setum electrone
and electrically conducting fluid a supply for direction, and a factor as a clearizably conducting fluid in the trayet site was describedly conducting fluid of the trayet site was describedly conducting fluid of the trayet site was describedly conducting fluid of the trayet site, see, e.g., p. 1313, the controlly conducting fluid of the trayet site, see, e.g., p. 1314, the conduction fluid of the trayet site, see, e.g., p. 1314, the conducting fluid of the trayet site, see, e.g., p. 1314, the conduction fluid of the trayet site, see, e.g., p. 1314, the conduction fluid of the trayet site, see, e.g., p. 1314, the conduction fluid of the trayet site, see, e.g., p. 1314, the conduction fluid of the trayet site, see, e.g., p. 1314, the conduction fluid of the conducti	electromorical power number and	
descrictly conducting fluid agreement a current that the third that the conducting fluid agreement a current the city part of the city process of the conducting fluid agreement a current the city part of the city process of the city part of the city process of the city part of	Contraction Bern Lawrence and Lawrence	supply, see, e.g., p. 1383.
descrictly conducting fluid agreement a current that the third that the conducting fluid agreement a current the city part of the city process of the conducting fluid agreement a current the city part of the city process of the city part of the city process of the city part of	The state of their country for directing	Reference No. 26 discloses an electrically
that the continual continual fluid privation a current flow path between the return alectrode, and the electrical post posts between the return alectrode, and the electrode forminal. The *356 Partent G. An electrostrugical system for applying electrical electrode and electrode forminal, see, e.g., p. 1313. The *356 Partent G. An electrostrugical system for applying electrical energy to a larget site on a shortest within or on a propertiest body, see typens comprising electrode and el	an emergency consistent that to the target site such	conducting fluid supply for directing electrically
The 'S36 P stend The 'S36 P s		conducting fleid to the turnet site, see, e.g., p. 1383.
their gamentase scarcest flow path between the electrode forminal. The "336 Patent The "336 Patent Reference No. 27 The "336 Patent No. 27 The "336 Pat	that the same of t	In Reference No. 76 the electrically conducting
tranum clactrope and the electrode terminal, see, e.g., 1333. The '35 F patent (5. As discretury feel by year for applying clearing and the control of the	the electrically conducting time generally entrem	Build generator a cucrent floor noth between the
The '35 F betent The '35 F betent' The '3		menn electrode and the electrode terminal, see, e.r.
The '356 Patent The '356 Patent G, An electrostry judy sissum for applying electrical energy to a larger sile on a base-mid-time on a larger sile on a base-mid-time of the control of t	electrode terminal.	
65. As electronary layers for applying electrical energy to a larger alto con a structure within or on a specific body, the system comprising a short larger alto can electronary proper supply, see, see, soil 2, third 3.66. Reference No. 27 discloses a high frequency power supply, and a electronary layer power supply, see, see, soil 2, third 3.66. Reference No. 27 discloses an lateral supply, see, see, soil 2, third 3.66. Reference No. 27 discloses an electronary power supply, see, see, soil 2, third 3.66. Reference No. 27 discloses an electronary power supply, see, see, soil 2, third 3.66. Reference No. 27 discloses an electronary layer and see the district of the seed of the		Da 1/5/4200-
65. An electromagical system for applying electrical energy to a larger site on a particular strong process of the system comprising a short having a product a body, see e.g., col. 2, lines 31-6.6 and electromagical production are production as a consecutor near the proximal end of the shall electrically coupled to the electromagical production are production as a consecutive near the proximal end of the shall electromagical production as a consecutive near the proximal end of the shall electromagical production as a consecutive near the proximal end of the shall electromagical production as a consecutive near the proximal end of the shall electromagical production are production as a consecutive near the proximal end of the shall electromagical production are production as a consecutive near the proximal end of the shall electromagical production are production as a consecutive near the electromagical production are production as a consecutive near the electromagical production and electromagical production are production as a consecutive near the proximal end of the shall electromagical production are production as a consecutive near the proximal end of the shall be electromagical production are productive to the electromagical productive the electromagical productive the electromagical productive the electromagical productive the electro		Reference No. 27
senger to a larger after on a structure within or on a structure of the state of th	The 536 Patent	
patients body, the system comprising: As electromarpical probe comprising a shoft having a proximal and and a distril cond, an electrode terminal disposed near the dissal end and **Comment No. 27 discloses a high frequency power coupting a shall having a provide a control protection of the control	45. An electrosturgical system for apprying elect it at	1 *
a electrower proper supply; an electrower price probe compering a shoft having, and a electrower price probe compering a shoft having, and a electrower price probe compering a shoft having, and a electrower price probe compering a shoft having proper pr	energy to a target site on a structure within or on a	1
angular special probe comparing a shaft having a presented by the state of the shaft having a present of the shaft destrictly coupling the electronic present of the shaft destrictly coupling the present study; a return electronic electronic present of the shaft destrictly properly and the shaft destrictly properly and the shaft destrictly properly and the electronic present present of the shaft destrictly properly and the electronic present present destrictly and the shaft destrictly properly and electronic present present destrictly and the shaft destrictly properly and electronic present present destrictly and the shaft destrictly properly and electronic present present destrictly and the shaft destr	petient's body, the system comprising:	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
an electronaryfied proble compersing a shift having a program and and a distill core, and a constraint of the constraint	a high frequency power supply;	Relepence No. 21 disciones a night frequency power
ecoparising a shall having a proximal and a distal cord, and alternated terminal disposed near the fixual end, and electrode terminal disposed near the fixual end, and electrode terminal disposed near the fixual end, and adjusted one tries distal end, see, e.g., orl., Jines 33-66. Reference No. 27 disclasses an electrode terminal end of the shall electrically coughing the electrode terminal to the electrical pick power supply. a return electrode electroducty accupied to the electroducty pick power supply, and electroducty pick power supply. International confidence in the shall electroducty propriet electroducty pick power supply, and electroducty pick power supply, and electroducty pick power supply and electroducty pick power supply. International confidence fined analysis of the electroducty pick power supply.		Supply, See, E.S., COL 2, Lines 38-00.
proximal and and a distal ond, an electrode terminal disposed near the distal end, distal ond, see, e.g., oil, june 33-66. Reference No. 77 discloses an interrode terminal and electrode terminal disposed near the distal end, a counceive near the proximal end of the shaft consciently coupling the electrode terminal to the concurrence of the proximal end of the shaft continuous plans or supply. an entire declarate electrodic prosplet the click continuous plans power supply; and a return to the conduction field another for discreting and electrodic returning the control proximal end of the that face of the that face of the shaft electrically explicit to the click control of the shaft electrodic proximal to	an electromagical probe comprising a shaft having a	
an electrode terminal disposed near the dixtal end, and and and at the consecutive near the previously end of the shall controlled prompts to the electronary lead power supply, are previously end of the shall end of the shall electronary lead power supply. The previously end of the shall electronary lead power supply, are previously end of the shall electronary lead power supply and electronary lead power supply; and electronary lead power supply and electronary lead power supply and electronary lead power supply and electronary lead to the electronary lead to the electronary lead power supply and electronary lead to the electronary lead to t	norwinal and and a distal cod.	
disposed near the first lend, see, e.g., col. 2, lines 34-66. Reference No. 27 declares a connector near the colorically complete fits the cheered terminal to the electronary lead power a supply. Reference No. 27 declares a connector near the electronary lead power a supply. Reference No. 27 declares a connector near the electronary lead power a supply. Reference No. 27 declares a connector near the electronary lead power a supply and seed to the electronary lead power any leave the electronary lead to the electronary lead power any leave the electronary lead to the electronary leave the electronary lea	Private	distal end, see, e.g., col. 2, lines 32 66.
disposed near the first lend, see, e.g., col. 2, lines 34-66. Reference No. 27 declares a connector near the colorically complete fits the cheered terminal to the electronary lead power a supply. Reference No. 27 declares a connector near the electronary lead power a supply. Reference No. 27 declares a connector near the electronary lead power a supply. Reference No. 27 declares a connector near the electronary lead power a supply and seed to the electronary lead power any leave the electronary lead to the electronary lead power any leave the electronary lead to the electronary leave the electronary lea	I will the last discovered near the digest and	Reference No. 27 discloses an electrode terminal
a connector near the proximal end of the shaft electrically coupling the electrical post of the proximal end of the shaft electrically coupling the electrod terminal to the electronuryleal power stupply; are called the shaft electrically power supply; and electronuryleal power		disposed near the distal and see, e.g., col. 2. lines
a domination must the proximate and of the shaft protection of the shaft proximate complied to the decimated terminated to the electronary lead power supply; are the electronary lead power supply; are returned to the electronary lead power supply; are returned to the electronary lead power supply; and electronary lead power supply see, e.g., col. 2, lines 34-64.	250	
proximal and of the shaft electrically coupling the electronary largely response to electronar		
checinous pages apoly; supply supply to the checinous place power supply; supply suppl	s connector near the proximal end of the shaft	tercuence 110. 11 decreases a connocur peri die
apply, see, e.g., col. 2, lines 34-66. Activates No. 27 discloses a rotum electrode electrosusgical power supply; and electrosusgical power supply; see, e.g., e.d. 2, lines 34-66. an electrically conducting fluid analysis for directing electrosusgical power supply; see, e.g., e.d. 2, lines 34-66.		
a return electrode electrically coupled to the electrosurgical power supply, see, ed. 2, lines 314-66. Reference No. 27 discloses a return electrode electrosurgical power supply, and supply, see, ed. 2, lines 314-66. Reference No. 27 discloses an electrically conducting.	electrosurgical power supply;	
electrosusgical power supply; and supply for directing supply, see, e.g., col. 2, lines 38-66. Reference No. 27 dischoses an electrically		supply, see, e.g., cal. 2, lines 31-66.
electrosusgical power supply; and supply for directing supply, see, e.g., col. 2, lines 38-66. Reference No. 27 dischoses an electrically	a neturn electrode electrically rounted to the	
supply, see, e.g., col. 2, lines 38-66. an electrically conducting fluid supply for directing Reference No. 27 discloses an electrically		
an electrically conducting fleid supply for directing Reference No. 27 discloses an electrically	enemonsters hower sublish and	
	601 100	Beforege No 22 discloses an electrically
electrically conducting fluid to the target rate such conducting that supply for aircraing electrically	an electrically coodneting front amplify for directing	
	electrically conducting fluid to the target site such	CENTERING FIGURE STANDAY HAS INFOCUME COCCURATION

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that	conducting fluid to the target site, soo, e.g., cot.],
flow math between the return electrode and the .	In Reference No. 27 the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g. col. 3, lines 43-53.
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	4590934
The '536 Patent	Reference No. 28
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
pity, gedocach bower subblh!	Reference No. 28 discloses a high-frequency power supply, see, e.g., col. 2, fines 23-33,
an electrosurgical probe comprising a shaft having a proximal end and a distal end,	Reference No. 28 discloses an electromargical probe comprising a shaft having a proximal end and a distal end, see, e.g., col. 2, lines 23-33.
An electrode terminal disposed near the distal end, and	Reference No. 28 disclases an electrode terminal disposed near the distal end, see, e.g., col. 2, lines 23-33.
a connector pear the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 21 discloses a councilor near the proximal end of the shaft electrically coupling the electrode terminal to the electronagical power supply, see, e.g., col. 2, lines 23-33.
a return electrode electrically coupled to the electrostogical power supply; and	Reference No. 21 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 2, lines 23-33.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 24 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., col. 2, line 18.
the electrically conducting fluid generates a correct flow path between the return electrode and the electrode terminal.	In Reference No. 28 the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g., col. 2, line 18.
	Payer et al
The '536 Patent	Reference No. 29
45. An electrosurgical system for applying electrical energy to a larger site on a structure within or set a	,

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The '536 Patent	Reference No. 29
45. An electrosurgical system for applying electrical energy to a larget site on a structure within or on a patient's body, the system comprising:	
a high trequency power supply;	Reference No. 29 discloses a high frequency power supply, sec. e.g., p. 67-68.
an electrosurgical probe comprising a shall having a proximal end and a distal end.	Reference No. 29 discloses an electrostraical probe comprising a shaft having a proximal end and a distal end, see, e.g., p. 67-68.
an electrode terminal disposed near the distal end, and	Reference No. 79 discloses an electrode terminal disposed near the fistal end, see, e.g., p. 67-68.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 29 dischares a connector near the praximal and of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., p. 67-68.
s return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 19 discloses a remm electrode electrically coupled to the electrosargical power aupply, see, e.g., p. 67-64.
an electrically conducting fluid supply for directing	Reference No. 29 discloses an electrically

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electrically conducting fluid to the target site such that

conducting flind supply for directing electrically conducting flind to the target site, see, e.g., p. 6.
In Reference No. 29 the electrically conducting fluid generate a current flow path between the return electrode and the electrode terminal, see, e.g., p. 63.

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that the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.

Reference, No. 30 The '536 Patent 45. An electrosurgical system for applying electrical energy to a target site on a irracture within or on a patient's body, the system comprising: Reference No. 30 discloses a high frequency power a high frequency power supply; supply, see, e.g., col. 4, line 32 - col. 5, line 10. Reference No. 30 discloses an electrosurgical probe as electrosurgical probe comprising a shaft having a proximal end and a distal end. comprising a shaft having a proximal end and a distal end, sec, e.g., col. 4, line 32 - col. 5, line 10. Reference No. 30 discloses an electrode terminal su electrode terminal disposed near the distal end, disposed near the distal end, see, e.g., col. 4, line 11 and - cal. 5, line 10. Reference No. 30 discloses a connector near the a connector near the proximal end of the shaft proximal end of the shaft electrically coupling the electrically coupling the electrode terminal to the electrosurgical power supply, electrode terminal to the electrosurgical power supply, sec. e.g., col. 4, line 32 - col. 5, line 10. Reference No. 30 disclores a return electrode a return electrode electrically coupled to the electrically coupled to the electrosurgical power electrocurgical power supply; and supply, see, e.g., cof. 4, line 32 - col. 3, line 10. an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that. the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.

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4674499 The '536 Patent Reference No. 31 45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising: Reference No. 31 discloses a high frequency power a high frequency power supply; supply, see, e.g., col. 2, lines 45-58. Reference No. 31 discloses an electrosurgical probe an electrosurgical probe comprising a shaft baving a comprising a shaft having a proximal end and a distal-end, see, e.g., col. 2, lines 45-58. proximal end and a distal end. an electrode terminal disposed near the distal end Reference No. 31 discloses an electrode terminal disposed near the distal end, see, e.g., col. 7; lines 45-58 a connector near the proximal end of the shaft Reference No. 31 discloses a connector pear the electrically coupling the electrode terminal to the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power electrusurgical power supply; supply, see, e.g., col. 2, lines 45-58. Reference No. 31 discloses a return electrode a return electrode electrically coupled to the electrosurgical power supply; and electrically coupled to the electrosurgical power supply, see, e.g., col. 2, lines 45-58.
Reference No. 31 discloses an electrically an electrically conducting fluid supply for directing electrically conducting fluid to the target site such conducting fluid supply for directing electrically

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that	conducting fluid to the target site, see, e.g., col. 3. line 31: col. 7. line 65.
the electrically conducting fluid generates a current	In Reference No. 31 the electrically conducting
	fluid generates a current flow path between the
flow path between the return electrode and the	renum electrode and the electrode terminal, see, e
electrode terminal.	
	col. 3, line 31; col. 7, line 65.
	4785 823
The '536 Patent	Reference No. 33
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 33 discloses a high frequency pow supply, see, e.g., col. 2, lines 45-69.
an electrosurgical probe comprising a shaft having a	Reference No. 33 discloses an electrosurgical pro
proximal end and a districted	comprising a shaft having a proximal end and a
bioximisi card sist s attest card*	distal end, see, e.g., col. 2, lines 45-69.
	Reference No. 33 discloses an electrode terminal
an electrode terminal disposed near the distal end,	disposed near the distral end, see, e.g., col. 2. lines
and	
	.45-69.
a connector near the preximal end of the shaft	Reference No. 33 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrosurgical power supply; .	electrode terminal to the electrosurgical power
	supply, see, e.g., col. 2, lines 45-69.
a return electrode electrically coupled to the	Reference No. 33 discloses a return electrode
electrosurgical power supply; and	electrically coupled to the electrosurgical power
and an appropriate the second	supply, see, e.g., col. 2, lines 45-69.
an electrically conducting fluid supply (or directing	
electrically conducting fluid to the target site such	
that	. 1
the electrically conducting third generates a current	
flow path between the return electrode and the	•
electrode terminal	•
CICCACCI INIMIAE	Nardella article
The '536 Patent	Reference No. 34
45. An electrosurgical system for applying electrical	
energy to a target sice on a structure within or on a	
patient's body, the system comprising:	
n high frequency power supply;	Reference No. 34 discloses a high frequency pow
	supply, see, e.g., p. 42.
an electrosurgical probe comprising a shaft having a	supply, sec, e.g., p. 42.
an electrosurgical probe comprising a shaft having a proximal end and a distal end.	supply, sec, e.g., p. 42.
an electrosurgical probe comprising a shaft having a proximal end and a distal end.	supply, sec, e.g., p. 42.
en electrosurgical probe comprising a shaft having a proximal end and a distal end, an electrode terminal disposed near the distal end,	supply, sec, e.g., p. 42.
an electrosurgical probe comprising a shall having a proximal end and a distal end, an electrode terminal disposed near the distal end, and	supply, see, e.g., p. 42.
an electrosurgical probe comprising a shaft traving a proximal end and a distal end, an electrode terminal disposed near the distal end, and a consector near the proximal end of the shaft	supply, sec, e.g., p. 42.
an electrosurgical probe comprising a shaft having a proximal end and a distal end, an electrode terminal disposed near the distal end, and electrode near the proximal end of the shaft lectrically coupling the electrode terminal to the	supply, sec, e.g., p. 47.
an electrosurgical probe comprising a shaft having a proximal end and a distill end, an electrode terminal disposed near the distal end, and a connector sear the proximal and of the shaft electrically coupling the electrode terminal to the electrosurgical power supply.	
an electrosurgical probe comprising a shaft having a proximal end and a dirtal end, an electrical terminal disposed near the distral end, and electrical proximal end of the shaft a consecutor near the proximal act and of the shaft electrically coupling the electrode terminal to the electrically coupling the electrode terminal to the electrosurgical power supply.	Reference No. 34 discloses a return electrode
an electrosurgical probe comprising a shaft having a proximal end and a dirtal end, an electrical terminal disposed near the distral end, and electrical proximal end of the shaft a consecutor near the proximal act and of the shaft electrically coupling the electrode terminal to the electrically coupling the electrode terminal to the electrosurgical power supply.	Reference No. 34 discloses a return electrode electrically coupled to the electroousgical power
an electrosurgical probe comprising a shall having a proximal and and a dirist lend, an electrode terminal disposed near the distal end, and a consector near the proximal cand of the shall a consector near the proximal cand of the shall consector near the proximal cand of the shall electrically coupling the electrode terminal to the electrosurgical power supply; a return electrode clertrically coupled to the electrosurgical power supply; and	Reference No. 34 discloses a return electrode
an electrosurgical probe comprising a shaft having a proximal end and a distal end, an electrode terminal disposed near the distal end, and and connection the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply; as return electrode electrically compled to the electrosurgical power supply; and an electrically conducting fluid supply for directing an an electrically conducting fluid supply for directing.	Reference No. 34 discloses a return electrode electrically coupled to the electroousgical power
an electrosurgical probe comprising a shaft having a proximal and and a distrat end, and an electrode terminal disposed near the distral end, and a consecutor near the proximal end of the shaft electrically coupling the electrode terminal to the circumstrated by the electrode terminal to the circumstrated by the electrode terminal coupled to the electrosurgical power supply; and an electrically conducting that the tax entage size or lectrosurgical power supply; and	Reference No. 34 discloses a return electrode electrically coupled to the electroousgical power
an electrosurgical probe comprising a shall having a proximal and and a dirist lend, an electrode terminal disposed near the distal end, and a consector near the proximal cand of the shall a consector near the proximal cand of the shall consector near the proximal cand of the shall electrically coupling the electrode terminal to the electrosurgical power supply; a return electrode clertrically coupled to the electrosurgical power supply; and	Reference No. 34 discloses a return electude electrically coupled to the electrosugical power
an electrosurgical probe comprising a shaft having a proximal and and a distrat end, and an electrode terminal disposed near the distral end, and a consecutor near the proximal end of the shaft electrically coupling the electrode terminal to the circumstrated by the electrode terminal to the circumstrated by the electrode terminal coupled to the electrosurgical power supply; and an electrically conducting that the tax entage size or lectrosurgical power supply; and	Reference No. 34 discloses a return electude electrically coupled to the electrosugical power

Celectorde terminal



Reference No. 36 discloses a connector pear the

Reference No. 36 discloses a return electrode electrically coupled to the electrosargical power

electrically couples to me electrostrapical power supply, see, e.g., col. 4, lines 4-39. Reference No. 36 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., col. 7,

In Reference No. 36 the electrically conducting

finid generates a current flow path between the return electrode and the electrode terminal, see, a

proximal cod of the shaft electrically coupling the electrode terminal to the electrosurgical power

electrode terminal.	
	Tocker et al article
The '536 Patent	Reference No. 35
45. An electrosurgical system for applying electrical	
energy to a target side on a structure within or on a	
patient's body, the system comprising:	
a high frequency power supply:	Reference No. 33 discloses a high frequency power
	supply, sec, e.g., p. 248.
an electrosurgical probe comprising a shaft having a	Reference No. 35 discloses an electrosurgical probe.
proximal end and a distal end,	comprising a straft having a proximal end and a
	distal end, see, e.g., p. 248.
an electrode terminal disposed near the distal end,	Reference No. 35 discloses an electrode terminal
and	disposed near the distal end, see, e.g., p. 248.
a connector near the proximal end of the shaft	Reference No. 35 discloses a connector pear the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrosurgical power supply;	electrode terminal to the electrosurgical power
	supply, soc, e.g., p. 248.
n return electrode electrically coupled to the	Reference No. 35 discloses a return electrode
electrosurgical power supply, and	electrically coupled to the electrosurgical power
	supply, see, e.g., p. 241.
no electrically conducting fluid supply for directing	Reference No. 35 discloses an electrically
electrically conducting fluid to the target site such	conducting fluid supply for directing electrically
that the electrically conduction fluid generates a current	conducting fluid to the target site, see, e.g., p. 248 In Reference No. 35 the electrically conducting
flow path between the return electrode and the	fluid generates a current flow path between the
electrode terminal.	terms electrode and the electrode tenninal see, e.g.,
ejectivic terment.	n. 248.
	4805616
The '536 Patent	Reference No. 36
45. An electrosurgical system for applying electrical	
energy to a target site on a structure Within or on a	
patient's body, the system comprising:	
a high frequency power supply;	Reference No. 36 discloses a high frequency power
a right malactural barren authold	supply, sec, e.g., col. 4, lines 4-39.
an electrosurgical probe comprising a shaft having a	Reference No. 36 discloses an electrosurgical probe
proximal end and a distal end	comprising a shaft having a proximal end and a
	distal end, see, e.g., col. 4, lines 4-39.
an electrode terminal disposed near the distal end,	Reference No. 36 discloses an electrode terminal
and	disposed near the distal end, see, e.g., col. 4, lines 4-4
•	39.

a connector near the proximal end of the shaft

s return electrode electrically coupled to the electrosurgical power supply; and

electrically coupling the electrode terminal to the electrosurgical power supply;

an electrically conducting third supply for directing electrically conducting fluid to the target site such

the electrically conducting fluid generates a current

flow path between the return electrode and the electrode terminal.

lines 30-32.

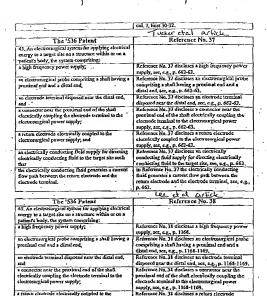
electrically coupled to the electrustraical power supply, see, e.g., p. 1168. Reference No. 38 discloses an electrically

conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., p. 1168.

return electrode and the electrode terminal, see, e.g.

fluid generates a current flow path between the

In Reference No. 38 the electrically cont



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electrode terminal.

a return electrode electrically coupled to the electrosurgical power supply; and

an electrically conducting fluid supply for directing electrically conducting fluid to the target site such

the electrically conducting fluid generates a current flow path between the return electrode and the

p. 1168.

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The '536 Patent	Reference No. 39
45. An electrosargical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply:	Reference No. 39 discloses a high frequency power supply, see, e.g., col. 5, Enes 1-47.
an electrosurgical probe comprising a shaft having a proximal and and a distal end,	Reference No. 39 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., col. 5, lines 1-47.
an electrode terminal disposed near the distal end, and	Reference No. 39 discloses an electrode terminal disposed near the distal end, see, e.g., col. 5, lines 1-47.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply.	Reference No. 39 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 5, lines 1-47.
a return electrode electrically coupled to the electrosurgical power supply, and	Reference No. 39 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 5, lines 1-47.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	
the electrically conducting fluid generator a current flow path between the return electrode and the electrode terminal.	
	4-832 048
The '536 Patent	Reference No. 40
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply:	Reference No. 40 discloses a high frequency power supply, see, e.g., col. 2, lines 62-65.
an electrosurgical probe comprising a shaft having a proximal end and a distal end,	Reference No. 40 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., col. 2, lines 19-22.
on electrode terminal disposed near the distal end, and	Reference No. 40 discloses an electrode terminal disposed near the distal end, see, e.g., col. 2, fines 19-22.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 40 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., vol. 2, lines 19-22.
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 40 discloses a rearm electrode electrically coupled to the electroaugical power supply, see, e.g., col. 2, lines 62-65.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such	

the electrically conducting fluid generates a cuflow path between the return electrode and the electrode tenuinal.

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- The '536 Patent	Reference No. 41
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 41 discloses a high frequency power supply, see, e.g., p. 291.
an electronumical probe comprising a shaft having a proximal end and a distal end,	Reference No. 41 descloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., p. 292.
an electrode terminal disposed near the distal end, and	Reference No. 41 discloses an electrode terminal disposed near the distal end; see, e.g., p. 292:
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply:	Reference No. 41 discusses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., p. 292.
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 41 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e. g., p. 291.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 41 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., p. 291.
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	In Reference No. 41 the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g., p. 291.

an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 41 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., p. 291.
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	is Reference No. 41 the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g., p. 291.
	Kramoloust
The 536 Patent	Reference No. 42
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	-
a high frequency power supply;	Reference No. 42 discloses a high frequency power supply, see, e.g., p. 275.
an electrosurgical probe comprising a shaft having a proximal end and a distal end	Reference No. 42 discloses an electrostargical probe comprising a shaft having a proximal end and a distal end, see, e.g., p. 275.
an electrode terminal disposed near the distal end, and	Reference No. 42 discloses an electrode terminal disposed near the distal end, see, e.g., p. 275.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 42 discloses a connector near the proximal end of the shall electrically coupling the electrode tennical to the electrosurgical power supply, see, e.g., p. 275.
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 42 discloses a return electrode . electrically coupled to the electrosurgical power supply, see, e.g., p. 275.
an electrically conducting theid supply for directing electrically conducting fluid to the target site such that	Reference No. 42 discloses an electrically conducting fluid supply for directing electrically conducting fluid so the target site, see, e.g., p. 275.
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	In Reference No. 42 the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g., p. 275.



	Wo 40 03157
The '536 Patent	Reference No. 43 "
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 43 discloses a high frequency power supply, see, e.g., p. 2.
an electrosurgical probe comprising a shaft having a proximal end and a distal end,	Reference No. 43 discloses an electrosurgical probe comprising a shaft having a principal end and a distal end, soe, e.g., p. 1, 10.
an electrode terminal disposes near the distal end, and	Reference No. 43 discloses an electrode terminal disposed near the distal end, see, e.g., p. 8, 10.
a connector near the proximal end of the shall electrically coupling the electrode terminal to the electromagical power supply;	Reference No. 43 discloses a connector near the proximal and of the shaft electrically coupling the electrode tenninal to the electrosurgical power supply, see, e.g., p. 8, 10.
a renum electrode electrically coupled to the electrosurgical power supply; and	Reference No. 43 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., p. 2.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 43 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., p. 11.
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	In Reference No. 43 the electrically cooducting field generates a current flow path between the return electrode and the electrode terminal, see, e.g., p. 11.

	supply, sec, c.g., p. 2.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 43 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., p. 11.
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	In Reference No. 43 the electrically conducting fluid generales a current flow path between the return electrode and the electrode terminal, see, e.g., p. 11.
	4920978
The '536 Patent	Reference No. 44
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a bigh frequency power supply;	Reference No. 44 discloses a high frequency power supply, see, e.g., col. 2, lines 26-51.
an electrosurgical probe comprising a shaft having a proximal end and a distal end.	Reference No. 44 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., col. 2, lines 26-51.
an electrode terminal disposed near the distal end, and	Reference No. 44 discloses an electrode terminal disposed near the distal end, see, e.g., col. 2, lines 26-51.
a connector near the proximal end of the shalt electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 44 discloses a connector near the proximal end of the sizalt electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 2, lines 26-51.
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 44 discloses a return electrode electrically coupled to the electrosurgical power . supply, see, e.g., col. 2, lines 26-51.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	

4931047

supply, sec, e.g., col. 2, line 31 - 53.

Reference No. 46 discloses a return electrode electrically coupled to the electrosurgical power supply, sec, e.g., col. 2, line 31 - 53.

Reference No. 46 discloses an electrically

conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., col. 6,

fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g.,

In Reference No. 46 the electrically conducting

The '536 Patent	Reference 140, 45
45. An electrosurgical system for applying electrical	
energy to a target site on a structure within or on a	i ' i
patient's body, the system comprising:	
a high frequency power supply;	Reference No. 45 discloses a high frequency power
- mg	supply, see, e.g., col. 4, line 21 - col. 5, line 6.
no electrosurgical probe comprising a shaft having a	Reference No. 45 discloses an electrosurgical probe
proximal and and a distal end,	comprising a shaft having a proximal end and a
MOXIMA INCIDENCE	distal end, ace, e.g., col. 4, line 40.
an electrode terminal disposed near the distal end,	Reference No. 45 discloses an electrode terminal
and	disposed near the distal end, see, e.g., col. 4, line 40,
a connector near the proximal end of the shall.	Reference No. 45 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrostratical power supply;	electrode terminal to the electrosurgical power
receipted from bound and ball	mapply, sec, c.g., col. 4, line 40.
a return electrate electrically coupled to the	Reference No. 45 dischoses a return electrode
electrosurgical power supply; and	electrically coupled to the electromagical power
electronnightar power supply, and	supply, see, e.g., col. 4, line 21 - col. 5, line 6.
an electrically conducting fluid supply for directing	Reference No. 45 discloses an electrically
electrically conducting fluid to the larget site such	conducting fluid supply for directing electrically
that	conducting fluid to the target site, see, e.g., col. 3,
1	finer 48-55.
the electrically conducting third generates a current	in Reference No. 45 the electrically conducting
flow path between the return electrode and the	fluid generates a current flow path between the
electrode terminal.	return electrode and the electrode terminal, see, e.g.,
	col. 3, lines 48-55.
	4936 281
The '536 Patent	Reference No. 46
45. An electrosurgical system for applying electrical	
energy to a target site on a structure within or on a	1
patient's body, the system comprising:	· ·
a high frequency power supply;	Reference No. 46 discloses a high frequency power
• • • • • • • •	supply, see, e.g., cot. 2, lines 31 - 53.
an electrosurgical probe comprising a shall having a	Reference No. 46 discloses an electrosurgical probe
proximal end and a distal end,	comprising a shaft having a proximal end and a
	distri end see, e.g., col. 2, line 31 - 53.
an electrode terminal disposed near the distal end.	Reference No. 46 discloses an electrode terminal
and	disposed near the distal end, see, e.g., col. 2, fine 31
	- 53.
a connector near the proximal end of the shaft	Reference No. 44 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrosurgical power supply;	electrode terminal to the electrosurgical power

line 42.

a return electrode electrically coupled to the electrosurgical power supply; and

an electrically conducting fluid supply for directing electrically conducting fluid to the target site such

the electrically conducting fluid generates a current -

flow path between the return electrode and the electrode tempical.

	col, 6, line 42.
4966 597	
The '516 Patent	Reference No. 47
45. An electrosurgical system for applying electrical	
cherry to a target site on a structure within or on a	
patient's body, the system comprising:	
2 high frequency power supply;	Reference No. 47 discloses a high frequency power
2 takin neducire, hower robbis.	supply, see, e.g., col. 1, line 34.
an electrosurgical probe comprising a shaft having a	7721 1381 131
proxitual end and a distal end.	* .
an electrode terminal disposed near the distrit and,	
and	
a connector near the proximal end of the shaft	
electrically coupling the electrode terminal to the	
electrosurgical power supply;	
a return electrode electrically coupled to the	Reference No. 47 discloses a return electrode
electrosurgical power supply; and	electrically coupled to the electrosurgical power
	supply, sec, c.g., col. 1, line 34,
an electrically conducting fluid supply for directing	
electrically conducting third to the target site such	processing the committee of the
that	
the electrically conducting fluid generates a current	
Now path between the return electrode and the electrode terminal.	
electrode (criminal,	4976711
The '536 Patent	Reference No. 48
45. An electrosurgical system for applying electrical	Reference No. 44
energy to a target side on a proseture within or on a	1
patients body, the system comprising:	
a high frequency power supply:	Reference No. 48 discloses a high frequency power
	supply, see, e.g., col. 2, line 28,
an electrosurgical probe comprising a shaft having a	Reference No. 41 discloses an electromergical probe
proximal end and a distal end.	comprising a shaft having a proximal end and a
	districted and, see, e.g., col. 2, line 28.
an electrode terminal disposed near the distal end,	Reference No. 48 discloses an electrode terminal
and ·	disposed near the distal end, see, e.g., col. 2, fine 28.
a connector near the proximal end of the shaft	Reference No. 48 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrosurgical power supply;	electrode terminal to the electrosurgical power
	supply, see, e.g., col. 2, line 28.
a terum electrode electrically compled to the	Reference No. 48 discloses a return electrode
electrosurgical power supply; and	electrically coupled to the electrosurgical power
	supply, see, c.g., col. 2, line 28.
an electrically conducting third supply for directing electrically conducting fluid to the largest site such	Reference No. 48 discloses an electrically
that	conducting fluid supply for directing electrically.
	conducting fluid to the target site, see, e.g., sol. 6,
the electrically conduction (fail) was noted a mount?	line 28; col. 4, line 6.
the electrically conducting fixed generales a current flow path between the return electrode and the	Inc 28; cot. 4, tipe 6. In Reference No. 48 the electrically conducting fluid generates a current flow path between the

flow path between the return electrode and the electrode terminal.

in Accordice No. 48 me electricary conducting fluid generates a current flow path between the return electrode and the electrode terminal, see, a col. 6, line 23, col. 4, line 6.

	4979948
The '536 Patent	Reference No. 49
45. An electrostrigical system for applying electrical	
energy to a target site on a structure within or on a	1
palient's body, the system comprising:	
a high frequency power supply;	Reference No. 49 discloses a high frequency power
a may a contact of the contact of	supply, see, e.g., col. 1, line 55.
an electrostryical probe comprising a shaft having a	Reference No. 49 discloses an electrosurgical probe
proximal and a distal and.	comprising a shaft having a proximal cod and a
position do and a minima and	distal end, see, e.g., col. 1, line 55.
an electrode terminal disposed near the distal end,	Reference No. 49 discloses an electrode terminal
and	disposed near the distal end, see, e.g., col. I, line 55.
a connector near the proximal end of the shaft	Reference No. 49 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrusargical power supply;	electrode terminal to the electrosurgical power
etterama Been haven and 1-24	supply, ace, s.g., col. 1, line 55.
a return electrode electrically coupled to the	Reference No. 49 discloses a tenura electrode .
electrosurgical power supply; and	electrically coupled to the electrosurgical power
character Complete Co	supply, see, e.g., col. I, line 55.
an electrically conducting fluid supply for directing	Reference No. 49 discloses an electrically
electrically conducting fluid to the target site such	conducting fluid supply for directing electrically
that	conducting fluid to the target site, see, e.g., col. 1,
	line 65.
the electrically conducting fluid generales a current	In Reference No. 49 the electrically conducting
flow path between the return electrode and the	fluid generates a current flow path between the
electrode terminal.	return electrode and the electrode terminal, see, e.g.,
	col. 1, line 65.
	DE 3930451AI
The '536 Patent	Reference No. 50
45. An electrosurgical system for applying electrical	
energy to a target site on a structure within or on a	
pelicul's body, the system comprising:	
a high frequency power supply;	Reference No. 50 discloses a high frequency power
	supply, see, e.g., col. 2, lines 21-63.
an electrosurgical probe comprising a shaft having a	Reference No. 30 discloses an electrosurgical probe
proximat end and a distal end,	comprising a shaft baving a proximal end and a
	distal end, see, e.g., col. 2; lines 21-63.
an electrode terminal disposed near the distal end,	Reference No. 50 discloses an electrode terminal
and	disposed near the distal end, see, e.g., col. 2, lines
	21-63.
a connector near the proximal end of the shaft	Reference No. 50 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrostrigical power supply;	electrode terminal to the electrosingical power
	supply, sec, e.g., tol. 2, lines 21-63.
a return electrode electrically coupled to the	Reference No. 30 discloses a return electrode
electropical power simily; and	electrically comied to the electromytical power

electrically coupled to the electrosurgical power supply, see, e.g., col. 2, lines 21-63.

electrode terminal.

that

electrosurgical power supply; a return electrode electrically coupled to the electrosurgical power supply; and

an electrically conducting fluid supply for directing electrically conducting fluid to the target site such

the electrically conducting fluid generates a current flow path between the return electrode and the

•	5007.908
The '536 Patent	Reference No. 51
45. An electrostrigibil system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 31 discloses a high frequency power supply, see, e.g., col. 2, line 41 - col. 3, line 58.
an electrosurgical probe comprising a shaft having a proximal end and a distal end.	Reference No. 51 dischoses an electromargical probe comprising a shaft having a proximal end and a distal end, see, e.g., col. 2, line 41 - col. 3, line 58.
an electrode tempinal disposed near the distal end, and	Reference No. 51 discloses so electrode terminal disposed near the distal end, see, e.g., col. 2, line 41 - col. 3, line 58.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No: 31 officioses a connector near the proximal end of the shall electrically coupling the cloctrode ferminal to the electrosurgical power supply, see, e.g., col. 2, line 41 - col. 3, line 58.
a return electrode electrically coupled to the electronoughest power supply; and	Reference No. 31 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 2, line 41 - col. 3, fine 58.
an electrically conducting fluid to the target site such electrically conducting fluid to the target site such that	Reference No. 51 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., col. 3, line 53.
the electrically conducting fluid generates a enterent flow path between the return electrode and the electrode terminal.	In Reference No. 51 the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g., col. 3, line 53.

	col. 3, line 53,
	. 5009 456
The '536 Patent .	Reference No. 52
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 52 discloses a high frequency power supply, soc, e.g., col. 3, lines 1-32.
an electrusurgical probe comprising a shall having a proximal end as d'a distal end,	Reference No. 52 discloses an electrosurgical probe- comprising a shaft having a proximal end and a distal and, see, e.g., col. 3, lines 1-32.
an electrode terminal disposed near the distal end, and	Reference No. 52 discloses an electrode terminal - disposed near the distal end, see, e.g., col. 3, lines 1- 32.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electromagical power supply;	Reference No. 31 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 3, lines 1-32.
a return electrode electrically coupled to the electrosurgical power supply, and	Reference No. 52 discloses a return electrode electrically coupled to the electrosurgical power - supply, see, e.g., col. 3, lines 1-32.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Releases No. 52 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., col. 2, line 26.
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	In Reference No. 52 the electrically conducting fluid-generates a current flow path between the return electrode and the electrode terminal, see, e.g.,

<u> </u>	col. 2, line 26.
	5035 696
The '536 Patent	Reference No. 53
45. An electrosurgical system for applying electrica	
energy to a target site on a structure within or on a	
patient's body, the system comprising:	<u> </u>
a high frequency power supply;	Reference No. 13 discloses a high frequency power
	supply, sec, e.g., col. 2, lines 28-55.
an electrosurgical probe comprising a shaft having a	Reference No. 53 discloses an electrosurgical probe
proximal end and a distal end,	comprising a shaft having a proximal end and a
an electrode terminal disposed near the distal end.	distal end, see, e.g., col. 2, lines 28-55. Reference No. 53 discloses an electrode terminal
and	disposed near the distal end, see, e.g., col. 2, line 28
a connector near the proximal and of the shaft	Reference No. 53 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shart electrically coupling the
electrostryical power supply:	electrode terminal to the electromy coupling the
11.11	supply, see, e.g., col. 2, lines 28-55.
a return electrode electrically coupled to the	Reference No. 53 discloses a return electrode
electrosurgical power supply; and	electrically coupled to the electrosurgical power
	supply, see, e.g., col. 2, lines 28-55.
an electrically conducting fluid supply for directing	Reference No. 53 discloses an electrically
electrically conducting fluid to the target site such	conducting fluid supply for directing electrically
that	conducting fluid to the target site, see, e.g., coi. 3
	line 63; col. 2, line 1,
the electrically conducting fluid generates a current	In Reference No. 53 the electrically conducting
flow path between the return electrode and the electrode terminal.	fluid generates a current flow path between the
clocuroce terminal.	return electrode and the electrode terminal, see, e.g.,
``	col. 3, line 63; col. 2, line 1.
The '536 Patent	Kramolassi del Atick
45. An electrosurgical system for applying electrical	Reservee No. 54
mergy to a target site on a structure within or on a	
patient's body, the system comprising:	
high frequency power supply:	Reference No. 54 discloses a high frequency power
	supply, see, c.g., p. 670.
in electrosurgical probe comprising a shaft baving a	Reference No. 54 discloses an electrosurgical probe
roximal end and a distal end.	comprising a shaft having a proximal end and a
	distal end, see, e.g., p. 669.
a electrode terminal disposed near the distal end.	Reference No. 54 discloses an electrode terminal
ad	disposed near the distal end, see, e.g., p. 669.
connector near the proximal end of the shaft	Reference No. 54 discloses a connector near the
fectrically coupling the electrode terminal to the	proximal end of the shaft electrically counting the
lectrosurgical power supply;	electrode terminal to the electrosurgical power
	supply, see, e.g., p. 669.
return electrode electrically coupled to the	Reference No. 54 discloses a return electrode
ectrosurgical power supply; and	electrically coupled to the electrosure ical mover
· · · · · · · · · · · · · · · · · · ·	supply, see, e.g., p. 670
electrically conducting fluid supply for directing	Reference No. 54 discloses an electrically
er to legarly conducting mond to the treefer site each	conducting fluid supply for directing electrically
	conducting theid to the target site, are, e.g. n 677
e eterniemis commersiff rund Leneuner # content	In Reference No. 34 the electrically conductive
an bartt octavecu the termin electrode and the	fluid generates a current flow both between the
	return electrode and the electrode terminal, see, e.g.,

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The '536 Patent	Reference No. 55
43. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 55 discloses a high frequency power supply, see, e.g., col. 2, lines 7-46.
an electromegical probe comprising a shall having a proximal end and a distal end	Reference No. 55 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., col. 2, lines 7-46.
an electrode terminal disposed near the distal end, and	Reference No. 55 discloses an electrode terminal disposed near the distal end, see, e.g., col. 2, lines 7- 46.
a connector near the praximal end of the shaft electrically coupling the electrode terminal to the electromagical power supply:	Reference No. 55 discloses a connector near the proximal end of the shaft electrically coupling the electrocyte comming to the electrocyte appear power supply, see, e.g., col. 2, lines 7-46.
a return electrode electrically coupled to the electromagical power supply; and	Reference No. 55 discloses a terum electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 2, fixes 7-46.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	
the electrically contineing fluid generates a current flow path between the seturn electrode and the electrode terminal.	
	5047 027
The '536 Patent	· Reference No. 56
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 56 discloses a high frequency power supply, see, e.g., col. 1, line 61 - col. 2, line 12.

The '536 Patent	Reference No. 56
43. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a pith nedrenel bowet subbly.	Reference No. 56 discloses a high frequency power supply, see, e.g., col. 1, line 61 - col. 2, line 12.
an electrosurgical probe comprising a shaft having a proximal end and a distal end,	Reference No. 56 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., col. 1, line 61 - col. 2, line 12.
an electrode terminal disposed near the distal end, and	Reference No. 36 discloses an electrode terminal disposed near the distal end, see, e.g., col. 1, line 61 - col. 2, line 12.
 connector near the preximal end of the shall electrically coupling the electrode terminal to the electrosurgical power supply; 	Reference No. 56 discloses a connector near the proximal end of the shaft electrically coupling the electrode tenninal to the electrosurgical power supply, see, e.g., col. 1, line 61 - col. 2, line 12.
a resure electrode electrically coupled to the electrosurgical power supply; and	Reference No. 56 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 1, line 61 - col. 2, line 12.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	
the electrically conducting fluid generates a current flow path between the action electrode and the electrode terminal.	

	olsen article
The '536 Patent	Reference No. 57
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 57 discloses a high frequency power supply, see, e.g., p. 3.
an electrosurgical probe comprising a shall having a preximal end and a distal end.	Reference No. 57 discloses an electrosurgical probe comprising a shaft having a proximal end and a distillend, see, e.g., p. 3.
an electrode terminal disposed near the distal end, and	Reference No. 57 discloses an electrode terminal disposed near the distal end, see, e.g., p. 3.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 57 discloses a connector near the proximal and of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., p. 3.
a return electrode electrically coupled to the electromagical power.supply; and	Reference No. 57 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., p. 3.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 57 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., p. 3.
the electrically conducting fluid generates a current flow path between the retirm electrode and the electrode terminal.	In Reference No. 57 the electrically conducting fluid generates a nument flow path between the return electrode and the electrode terminal, see, e.g.

The '536 Patent	Reference No. 58
45. An electrosurgical system for applying electrical energy to a larget site on a structure within or on a patient's body, the system comprising.	
a high frequency power supply;	Reference No. 58 discloses a high frequency power supply, see, e.g., col. 3, lines 9-49.
an electrosurgical probe comprising a shaft having a proximal end and a distal end,	Reference No. 38 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., col. 3, lines 9-49.
an electrode terminal disposed near the distail end, and	Reference No. 58 discloses an electrode terminal disposed near the distal end, see, e.g., col. 3, lines 9- 49.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electronic gical power supply;	Reference No. 38 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 3, lines 9-49.
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 58 discloses a return electrode electrically coupled to the electrosurgical power - supply, see, e.g., col. 3, lines 9-49.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	

	5084 044
The '536 Patent	Reference No. 59
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply:	
an electrosurgical probe comprising a shaft having a proximal end and a distal end.	Reference No. 59 discloses an electrossingical probe comprising a shall having a proximal end and a distal end, see, e.g., col. 3, lines 5-36.
an electrode terminal disposed near the distal end, and	Reference No. 59 discloses an electrode terminal disposed near the distal end, see, e.g., col. 3, lines 5- 36.
a connector near the proximal end of the shall electrically coupling the electrode terminal to the electrostrated power supply;	Reference No. 59 dischors a connector near the proximal end of the shall electrically coupling the electrode terminal to the electrostical power supply, see, e.g., col. 3, finer 5-36.
a renum electrode electrically coupled to the electrosurgical power supply; and	
an electrically conducting fluid supply for directing electrically conducting fluid to the target life such that	
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	

flow path between the return electrode and the	
	5085 659
The 1536 Patent	Reference No. 60
45. An electrosorgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply:	Reference No. 60 discloses a high frequency power supply, see, e.g., col. 4, Imr 45.
an electronizated probe comprising a shaft having a proximal and a distal and,	Reference No. 60 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, acc, e.g., col. 3, line 35.
an electrode terminal disposed near the distal end, and	Reference No. 60 discloses an electrode terminal disposed near the distal end, see, e.g., col. 3, line 35.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electromagnet power supply;	Reference No. 60 discloses a connector near the posternal end of the sheft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 7, line 35.
a return electricic electrically coupled to the electrosurgical power supply; and	Reference No. 60 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 4, line 45.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	•
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	

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The '536 Patent	Reference No. 61
45. An electrosurgical system for applying electrical energy to a target site on a attractive within or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 61 discloses a high frequency power supply, see, e.g., col. 3, line 30.
proximal end and a distal end,	Reference No. 61 discloses an electrosurgical probe comprising a shaft haying a proximal end and a distal end, see, e.g., col. 3, line 30.
an electrode terminal disposed near the distal end,	Reference No. 61 discloses an electrode terminal

an electrode lest Qε 30, and Reference No. 61 discloses a connector pear the a connector near the proximal end of the shalt proximal end of the shaft electrically coopling the electrically coupling the electrode terminal to the electrosurgical power supply; electrode terminal to the electrosurgical power supply, see, e.g., col. 3, line 30.
Reference No. 61 discloses a return electrode a return electrode electrically coupled to the electrically coupled to the electrostryical power electrosurgical power supply; and supply, see, e.g., col. 3, line 10. an electrically conducting fluid supply for directing electrically conducting fluid to the target site such the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.

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The '536 Patent	Reference No. 62
45. An electrosurgical system for applying electrical energy to a larget site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply:	Reference No. 62 discloses a high frequency power supply, see, e.g., col. 2, line 35.
an electrosurgical probe comprising a shaft baving a proximal and and a distal end,	Reference No. 62 discloses an electrosurgical probe comprising a shaft baying a proximal end and a distal end, see, e.g., col. 2, line 20.
an electrode terminal disposed near the distal end, and	Reference No. 62 discloses an electrode terminal disposed near the distal end, 355, e.g., col. 2, line 20.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply:	Reference No. 61 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 2, line 20.
a telum electrode electrically coupled to the electrosurgical power supply; and	Reference No. 62 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 2, line 35.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	
the electrically conducting fluid generates a current flow path between the return electrode and the	

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The '536 Patent	Reference Na. 64
45. An electrosurgical system for applying electrical	
cherry to a target site on a structure within or on a .	
patient's body, the system comprising:	· ·
a high frequency power supply;	Reference No. 64 discloses a high frequency power
	supply, sec, e.g., col. 2, line 5.
an electrosurgical probe comprising a shaft having a	Reference No. 64 discloses an electrosurgical probe
proximal end and a distal end,	comprising a shaft having a proximal end and a
	distal end, see, e.g., col. 4, line 25.
an electrode terminal disposed near the distal end,	Reference No. 64 discloses an electrode terminal
and .	disposed near the distal end, see, e.g., col. 4, line 25,
a connector near the proximal end of the shaft	Reference No. 64 discloses a connector pear the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrosurgical power supply:	electrode terminal to the electrosurgical power
	supply, see, e.g., col. 4, line 25.
a return electrode electrically coupled to the	Reference No. 64 discloses a return electrode
electrasurgical power supply; and	electrically coupled to the electrosurgical power
	supply, see, e.g., col. 2, line 5.
an electrically conducting fluid supply for directing	
electrically conducting fluid to the target site such	
that	
the electrically conducting fluid generates a current	
Now path between the return electrode and the	
electrode terminal.	
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The '536 Patent	. Reference No. 65
45. An electrosurgical system for applying electrical	Reference No. 65
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a	Reference No. 65
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a	Reference No. 65 discloses a high frequency power
43. An electroscripted system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising: a high frequency power supply;	Reference No. 65 discloses a high frequency power supply, see, e.g., col. 5, line 34.
43. An electroaugical system for applying electrical cuergy to a target site on a surreture within or on a patient's body, the system comprising: a high frequency power supply; an electrosurgical probe comprising a shaft having a	Reference No. 65 discloser a high frequency power supply, see, e.g., col. 5, line 34. Reference No. 65 discloser an electrosurgical probe.
43. An electroscripted system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising: a high frequency power supply;	Reference No. 65 discloses a high frequency power supply, see, e.g., col. 5, line 34. Reference No. 65 discloses an electroscopical probe comprising a shaft having a proximate and and
43. An idearountieal system for applying electrical energy to a Ingret size on a structure within or on a patient's body, the system comprising: a high frequency power supply; an electromagical probe comprising a shaft having a proximal end and a distal end.	Reference No. 65 diacloses a high frequency power supply, see, e.g., col. 5, line 24. Reference No. 65 diactoses no electrosurgical probe comprising a shaft having a proximat end and a direct lend see, e.g., col. 5, line 5.
4.). An electrometrical system for applying electrical reagy is a larger site on a surrount: which or on a patient's body, the system comprising: a high frequency power supply; an electrometric probe comprising a shaft having a proximal end and a distal end, no electrode terminal disposed near the distal end,	Reference No. 65 discloses a high frequency power supply, see, c.g., col. 5, line 34. Reference No. 65 discloses no electrosurgical probe, comprising a lath having a proximal cod and a draul end, see, c.g., col. 5, line 34. Reference No. 65 discloses are alectropode terminal
4.3. An electroscriptical system for applying electrical category is a target site on a surrounce within or on a patient's body, the system comprising: a high frequency power supply; an electroscopyingical probe comprising a shaft having a proximal end and a distol end, so electrode tennical disposon near the distral end, and	Reference No. 63 discloses a high frequency power supply, see, e.g., end. 5, time 34. Reference No. 63 discloses an electroscopical probe comprising a shall having a proximate end and fraillend see, e.g., end. 5, line 34. Reference No. 63 discloses are alectrode terminal disposed mare the sixtle end, esc., end. 5, file 34.
43. An electromerical spaces for applying electrical energy is a target site on a structure within or on a patient; body, the system comprising: a high frequency power supply; an electrosurgical probe comprising a shaft having a proximal end and a districted, an electrode terminal disposed next the districted, and electrode terminal disposed next the districted, and a second continuous districted of the shaft of the shaft.	Reference No. 63 discloses a high frequency power supply, see, e.g., col. 5, fine 34. Reference No. 63 discloses an electroscopical probe-comprising a shall having a proximal end and a formation of the shall have been proximal end and a formation of the shall have been provided the shall be shall b
4.3. An electroscriptical system for applying electrical energy is a large site on a surrounce within or on a patient, body, the system comprising: a high frequency power supply; an electroscriptical probe comprising a shaft having a proximal cod and a distal end, not electroscriptical probe comprising a shaft having a proximal cod and a distal end, not electroscriptical electroscriptical end of the shaft electrically configure the electroscriptical end of the shaft electrically configure the electroscriptical end of the shaft electrically configure the electroscriptical ends.	Reference No. 65 discloses a high frequency power supply, see, e.g., end. 5, time A: Reference No. 65 discloses as electroscopical probe, comprising a shall having a proximal cod and a divalent no. 2, e.g. of. 5, line 34. Reference No. 65 discloses are alcomote terminal divariant, so e.g., end. 5, line 34. Reference No. 65 discloses are alcomote terminal disposed near the sixtle end, so e.g., end. 5, line 34. Reference No. 65 discloses a connector near the resolution of the shart electrical reconstituent of the shart electrical reconstituent of
43. An electromerical spaces for applying electrical energy is a target site on a structure within or on a patient; body, the system comprising: a high frequency power supply; an electrosurgical probe comprising a shaft having a proximal end and a districted, an electrode terminal disposed next the districted, and electrode terminal disposed next the districted, and a second continuous districted of the shaft of the shaft.	Reference No. 63 discloses a high frequency power supply, see, e.g., col. 5, time 34. Reference No. 63 discloses an electrosurgical probe-comprising a shall having a proximal read and a direction of the comprising a shall having a proximal read and a direction of the comprising a shall have a proximal read and a direction of the comprising a shall have a shall be a shall
43. An electroscriptical system for applying electrical energy is a target site on a strongare within or on a patient, body, the system comprising: a bigh forequency power supply; as high forequency power supply; as not electroscriptical probe comprising a shaft having a proximal end and a distal end, an electroscriptical probe comprising a shaft having a proximal end and a distal end, an electroscriptical disposed near the distal end, and electrically copiling the electrode terminal to the electroscriptical power supply:	Reference No. 65 discloses a high frequency power supply, see, e.g., end. 3, time A: Reference No. 65 discloses as electrosurgical probe, comprising a shall having a proximal cod and a divallend, see, e.g., end. 5, line 34. Reference No. 65 discloses are alcentode terminal disposad mare the situle end, see, e.g., end. 5, line 34. Reference No. 65 discloses an electrode terminal disposad mare the situle end, see, e.g., end. 5, line 34. Reference No. 65 discloses a connector may be proximal and of the shart electrically copaling the electrode terminals to the electrosurgical power' supply, see, e.g., col. 5, line 34.
4.). An electroscriptical system for applying electrical energy is a large site on a strongen within or on a patient; body, the system comprising: a high frequency power supply: an electroscriptical probe comprising a shaft having a proximal end and a distal enot. an electroscriptical probe comprising a shaft having a proximal end and a distal enot. an electroscriptical probe comprising a shaft having a proximal end and a distal enot. an electroscriptical probes and the distal end, and a shaft having a continuation of the shaft electroscriptical power electroscriptical power electroscriptical power expery. a return electrode electrically coupled to the	Reference No. 65 discloses a high frequency power supply, see, e.g., end. 5, time 34. Reference No. 65 discloses an electrosurgical probe, comprising a shall having a proximal end and a diminated, see, e.g., end. 5, line 34. Reference No. 65 discloses are alcomost estaminal disposed mare the shall end of the comprising a shall having a proximal end and disposed mare the shall end of the compression of the shall disposed mare the shall end of
43. An electroscriptical system for applying electrical energy is a target site on a strongare within or on a patient, body, the system comprising: a bigh forequency power supply; as high forequency power supply; as not electroscriptical probe comprising a shaft having a proximal end and a distal end, an electroscriptical probe comprising a shaft having a proximal end and a distal end, an electroscriptical disposed near the distal end, and electrically copiling the electrode terminal to the electroscriptical power supply:	Reference No. 65 discloses a high frequency power supply, see, e.g., end. 3, line A: Reference No. 65 discloses as electrosurgical probe, comprising a shaft having a proximal cod and a divalent notation of the comprising a shaft having a proximal cod and a divalent notation, e.g., end. 5, line 34. Reference No. 63 discloses an electrode terminal disposed mare the either ed. ope., ep. ed. 5, fine 34. Reference No. 65 discloses a connector near the proximal and of the shart electrically coupling the electrode terminal to the electrosurgical power's supply, see, e.g., col. 5, line 34. Reference No. 65 discloses a return electrode electrically complete to the electrosurgical power
43. An electroscriptical spream for applying electrical energy is a target site on a strongen within or on a patient; body, the system comprising: an electroscriptical probe comprising a shaft having a praximal end and a distal end, an electroscriptical probe comprising a shaft having a praximal end and a distal end, an electroscriptical probe comprising a shaft having a praximal end and the distal end, a content or term in proximal end of the shaft electrically coupling the electroscriptical power supply; a return electroscriptical power supply; a return electroscriptical power supply; and electroscriptical power supply; an	Reference No. 63 discloses a high frequency power supply, see, e.g., col. 5, line M. Reference No. 63 discloses an electrosurgical proble comprising a shaft having a proximat end and a dirtulent, see, e.g., col. 5, line 34. Reference No. 63 discloses are alcomose terminal disposed mare the shatter day, see, e.g., col. 5, line 34. Reference No. 63 discloses are alcomode terminal disposed mare the shatter decive, e.g., col. 5, line 34. Reference No. 63 discloses a commence near the proximal end of the shart electrical coupling the state of the shart electrostical coupling the shart electrostical coupling the shart electrostic shart electrostic discovery that the shart electrostic discovery that electrostic discovery that the shart electrostic discovery that the shart electrostic discovery that the shart electrostic discovery that electrostic discovery that the shart electrostic discovery that electrostic discovery that the shart electrostic discovery that electros
43. An electroscriptical spaces for applying electrical energy is a target site on a structure within or on a patient's body, the system comprising: a bigh frequency power supply: an electroscriptical probe comprising a shirth laving a proximal end and a distal end, and electroscriptical disposed near the distal end, and and a concern one of the proximal end of the shift electroscriptical probe supply: a return electroscriptical proper supply: a return electroscriptical proper supply; a return electroscriptical proper supply or directing	Reference No. 63 discloses a high frequency power supply, see, e.g., col. 5, time 34. Reference No. 63 discloses an electrosuryleal probe comprising a shall having a proximal end and a fortification, e.g., e.g
43. An electrometical spaces for applying electrical energy is a target site on a strongen within or on a patient; body, the system comprising: a high forqueous power supply; an electrometical probe comprising a shaft having a praximal end and a distal end, an electrotic term in a light size of the shaft electrically coupled term in a disciplination of the shaft electrically coupling the electrod terminal supply for electrodic terminal supply for electrodic terminal supply for electrodic terminal supply for electrodic terminal supply for electrometical power supply; an extent electrodic electrically coupled by the electrometical power supply; an electrodic power supply; an electrodic power supply; and electrodic power supply and an electrodic power supply for electrical power supply.	Reference No. 63 discloses a high frequency power supply, see, £c., col. 5, line 34. Reference No. 65 discloses an electrosurpical proble comprising a shaft having a proximat cod and a dirtulend, see, £c., col. 5, line 34. Reference No. 63 discloses an electrode terminal disposed near the sixtle edge, e.g., col. 5, line 34. Reference No. 63 discloses an electrode terminal disposed near the sixtle edge, e.g., col. 5, line 34. Reference No. 63 discloses a connector near the proximal and of the shaft electrically coupling the electrode truminal to the electrosus-giral power supply, see, £c., col. 3, line 34. Reference No. 63 discloses an electrosus-giral power supply, see, £c., col. 3, line 34. Reference No. 65 discloses an electrically conducted to the sixtle sixtl
43. An electroscriptical spaces for applying electrical energy is a target site on a structure within or on a patient's body, the system comprising: a bigh frequency power supply: an electroscriptical probe comprising a shirth laving a proximal end and a distal end, and electroscriptical disposed near the distal end, and and a concern one of the proximal end of the shift electroscriptical probe supply: a return electroscriptical proper supply: a return electroscriptical proper supply; a return electroscriptical proper supply or directing	Reference No. 63 discloses a high frequency power supply, see, e.g., col. 5, time 34. Reference No. 63 discloses an electrosurgical probe-comprising a shall having a proximal end and a fortial end, see, e.g., col. 5, time 34. Reference No. 63 discloses are not obta tuminal disposed near the situal end, see, e.g., col. 5, time 34. Reference No. 63 discloses a consection near site proximal and of the shan electrically coupling the electrode tuminal to the electrosurgical power supply, see, e.g., col. 5, time 34. Reference No. 63 discloses a resuma electrode electrically coupled so the electrosurgical power Networks and Comprehence of the shan electrosurgical power of the shan
4.). An electroscriptical spaces for applying electrical energy is a target site on a strongen within or on a patient's body, the system comprising: an electrosurgical probe comprising a shalf having a praximal end and a distal end, an electrostropical probe comprising a shalf having a praximal end and a distal end, an electrode terminal benefit of the shalf electrically coupling the electrode terminal solution are described to employ the electrode terminal to the electrically coupling the electrode terminal to the electroscription power supply. a runn electrode electrically coupled to the electroscription power supply and an electroscription power supply, and an electroscription of the	Reference No. 63 discloses a high frequency power supply, see, £c., col. 5, line 34. Reference No. 65 discloses an electrosurpical proble comprising a shaft having a proximat cod and a dirtulend, see, £c., col. 5, line 34. Reference No. 63 discloses an electrode terminal disposed mare the sixtle end, see, £c., col. 5, line 34. Reference No. 63 discloses an electrode terminal disposed mare the sixtle end, see, £c., col. 5, line 34. Reference No. 65 discloses a connector near the proximate and of the shart electrically coupling the electrode terminal to the electrosurgical power supply, see, £c., col. 3, line 34. Reference No. 65 discloses a return electrode supply, see, £c., col. 5, line 34. Reference No. 65 discloses a return electrode supply, see, £c., col. 5, line 34. Reference No. 65 discloses an electrically conducting their in the target site, see, £c., col. 2, line 10.
43. An electroscriptical spaces for applying electrical concept to a target size on a structure within or on a patient; body, the system comprising: a telementary power supply; an electroscriptical probe comprising a shaft having a proximal end and a distal end, an electroscriptical probe comprising a shaft having a proximal end and a distal end, and in electroscriptical disposed near the distal end, sud a return classification of the shaft electroscriptical power supply; a return electroscriptical prover supply; a return electroscriptical power supply; a return electroscriptical supply for directing electrically commenting fluid to the target site pach m electrically conducting fluid supply for directing electrically conducting fluid supply for directing electrically conducting fluid spectrum a current	Reference No. 63 discloses a high frequency power supply, see, e.g., col. 5, time 34. Reference No. 63 discloses an electrosurgical probe, comprising a shall having a proximal end and a distributed, see, g., col. 5, line 34. Reference No. 63 discloses rea neighbor tomatical disposed near the rivital end, see, e.g., col. 5, line 34. Reference No. 63 discloses a sometone near See proximal and of the chart heterolically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 5, line 34. Reference No. 63 discloses a sometime electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 5, line 36. Reference No. 63 discloses a resume electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 5, line 36. Reference No. 65 discloses a resume electrode electrically tomatical fluid supply for directing electrically conducting fluid in the turner situs, see, e.g., col. 2, line 10, col. 6, line 65.
43. An electroscriptical spaces for applying electrical energy is a target site on a strongen within or on a patient's body, the system comprising: a shall now a patient's body, the system comprising: a shall haven a high frequency power supply; an electroscriptical probe comprising a shall having a proximal end and a distal end of the shall end of the shall electrically coupling the electroscriptical power supply; and electroscriptical power supply; and a return electroscriptical power supply; and electrically conducting fluid to the target site such that	Reference No. 63 discloses a high frequency power supply, see, e.g., col. 5, time 34. Reference No. 65 discloses an electrosurpical probe, comprising a shall having a proximat end and a dirtulend, see, e.g., col. 5, line 34. Reference No. 65 discloses are alectrode terminal disposed near the sixtle end, see, e.g., col. 5, line 34. Reference No. 65 discloses an electrode terminal disposed near the sixtle end, see, e.g., col. 5, line 34. Reference No. 65 discloses a connector near the proximate and of the shart electrolity coupling the electrode terminal to the electrowargical power supply, see, e.g., col. 3, line 34. Reference No. 65 discloses a return electrode electrically complete to the electromytical power conducting that disposit on the electromytical power conducting that disposit of the electromytical power conducting that disposit of the electromytical power conducting that disposit of the electromytical power conducting that in the target site, see, e.g., col. 2, line 10, col. 6, line 65. In Reference No. 65 the electrically conducting
43. An electroscriptical spaces for applying electrical concept to a target size on a structure within or on a patient; body, the system comprising: a telementary power supply; an electroscriptical probe comprising a shaft having a proximal end and a distal end, an electroscriptical probe comprising a shaft having a proximal end and a distal end, and in electroscriptical disposed near the distal end, sud a return classification of the shaft electroscriptical power supply; a return electroscriptical prover supply; a return electroscriptical power supply; a return electroscriptical supply for directing electrically commenting fluid to the target site pach m electrically conducting fluid supply for directing electrically conducting fluid supply for directing electrically conducting fluid spectrum a current	Reference No. 63 discloses a high frequency power supply, see, e.g., col. 5, time 34. Reference No. 63 discloses an electrosurgical probe, comprising a shall having a proximal end and a distributed, see, g., col. 5, line 34. Reference No. 63 discloses rea neighbor tomatical disposed near the rivital end, see, e.g., col. 5, line 34. Reference No. 63 discloses a sometone near See proximal and of the chart heterolically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 5, line 34. Reference No. 63 discloses a sometime electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 5, line 36. Reference No. 63 discloses a resume electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 5, line 36. Reference No. 65 discloses a resume electrode electrically tomatical fluid supply for directing electrically conducting fluid in the turner situs, see, e.g., col. 2, line 10, col. 6, line 65.

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. The '536 Patent .	Reference No. 66
43. An electrostrigical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:	
s high frequency power supply;	Reference No. 66 discloses a high frequency power supply, see, e.g., col. 2, line 1.
an electrosurgical probe comprising a shaft having a proximal end and a distal end,	Reference No. 66 discloses an electrostargical probe comprising a shall having a proximal end and a distal end, see, e.g., col. 3, line 14.
an electrode terminal disposed near the distal end,	Reference No. 66 discloses an electrode terminal disposed near the distal end, see, e.g., col. 3, line 14.
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electromagnetic power supply;	Reference No. 64 discloser a connector near the proximal end of the shaft electrically coupling the electrosurgical power supply, see, e.g., col. 3, line 14.
a reman electrode electrically coupled to the electrosurgical power supply; and	Reference No. 66 discloses a reman electrode electrically coupled to the electrosargical power supply, see, e.g., col. 2, Hoc 1.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	Reference No. 66 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the sarget site, see, e.g., end. 2. [fige 10.
the electrically conducing fluid generates a current flow path between the return electrode and the electrode terminal.	In Reference No. 66 the electrically conducting fluid generates a current flow path between the return electrode and the electrode teiminal, see, e.g., cot. 2, line 10.

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The '536 Patent	Reference No. 67
45. An electrosurgical system for applying electrical energy to a target site on a structure whilin or on a patient's body, the system comprising:	
a high frequency power supply;	Reference No. 67 discloses a high frequency power supply, so, e.g., col. 2, line 35.
an electrosurgical probe comprising a shall having a proximal end and a distal end	Reference No. 67 discloses on electrosurgical probe comprising a shaft baying a proximal end and a distal end, see, e.g., end. 2, line 35.
an electrode terminal disposed near the distal end,	Reference No. 67 discloses an electrode terminal disposed near the distal end, see, e.g., col. 2, line 35.
a connector near the preximal end of the shaft electrically coupling the electrode terminal to the electromagnesi power supply:	Reference No. 67 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 2, time 35.
a return electrode electrically coupled in the electrosurgical power supply; and	Reference No. 67 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 2, line 35.
so electrically conducting fluid to the target site such electrically conducting fluid to the target site such that	Reference No. 67 discloses an electrically conducting fluid supply for directing electrically conducting fluid to the target site, see, e.g., col. 4, line 10.
the electrically conducing fluid generates a current flow path between the roturn electrode and the electrode terminal.	In Reference No. 67 the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal, see, e.g.,col. 4, line 10.

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The '536 Patent	Reference No. 68
45. An electrosurgical system for applying electrical coergy in a target site on a structure within or on a patient's body, the system comprising:	
a high frequency power supply:	Reference No. 68 discloses a high frequency power supply, see, e.g., col. 3, line 25.
on electrosurgical probe comprising a shaft baving a proximal end and a distal end	Reference No. 68 discloses an electrosurgical probe comprising a shaft having a proximal end and a distal end, see, e.g., col. 3, lina 25.
an electrode terminal disposed near the distal end, and	Reference No. 68 discloses an electrode terminal disposed near the distal end, soc, e.g., col. 3, line 25
a connextor near the proximal end of the shaft electrosurgical power supply:	Reference No. 61 discloses a compositor near the proximal and of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 3, line 25.
a return electrode electrically compled to the electrosurgical power supply; and	Reference No. 61 discloses a traum electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 3, line 25.
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that	-
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal.	

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The '536 Patent	Reference No. 69	
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:		
a high frequency power supply;	Reference No. 69 discloses a high frequency power supply, see, e.g., col. 3, line 20.	
an electrosurgical probe comprising a shaft having a proximal end and a distal end,	Reference No. 69 discloses an electrosurgical probe comprising a shall baving a proximal end and a distal cod, see, e.g., col. 3, line 20.	
an electrode terminal dispused near the distal end, and	Reference No. 69 discloses an electrodo terminal disposed near the distal end; see, e.g., col. 3, line 20.	
a connector near the proximal end of the shall electrically coupling the electrode terminal to the electrosurgical power supply;	Reference No. 69 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power stupply, see, e.g., e.d. 3, line 20.	
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 69 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 3, line 20.	
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that		

proxymu end and a distal end,	districted, sec, e.g., col. 3, line 20.		
an electrode terminal disposed near the distal end,	Reference No. 69 discloses an electrode terminal		
and	disposed near the distal end; see, e.g., col. 3, line 20.		
a connector near the proximal end of the shall	Reference No. 69 discloses a connector new the		
electrically coupling the electrodo terminal to the	proximal end of the shaft electrically compling the		
electrosurgical power supply;	electrode terminal to the electrostreical power		
Community of the second	supply, sec, e.g., col. 3, Suc 20,		
a return electrode electrically coupled to the	Reference No. 69 discloses a return ejectrode		
electrosurgical power supply; and	electrically coupled to the electrosurgical power		
ettera man Etera bower saldail ann	supply, sor, a.g., col. 3, line 20,		
an electrically conducting fluid supply for directing			
electrically conducting fluid to the target site such			
that			
the electrically conducting fluid generates a current			
flow path between the return electrode and the			
electrode terminal.	1		
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The '536 Patent	Reference No. 70		
45. An electrosurgical system for applying electrical			
energy to a target site on a structure within or on a			
patient's body, the system comprising:			
a high frequency power supply;	Reference No. 70 discloses a high frequency power		
	supply, see, e.g., col. 2, line 38.		
an electrosurgical probe comprising a shaft having a	Reference No. 70 discloses an electrosargical probe		
proximal and and a distal end.	comprising a shaft having a proximal end and a		
	distal end, soc, e.g., col. 2, line 38.		
an electrode terminal disposed near the distal end,	Reference No. 70 discluses an electrode terminal		
and .	disposed near the distal and, see, e.g., col. 2, line 32.		
a connector near the proximal end of the shaft.	Reference No. 70 discloses a connector near the		
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the		
electroningical power supply:	electrode terminal to the electrosurgical power		
	supply, see, e.g., col. 2, line 38.		
a return electrode electrically coupled to the	Reference No. 70 discloses a setura electrode		
electrosurgical power supply; and	electrically coupled to the electromagical power		
excession great powers supply, and	supply, see, e.g., col. 2, line 31.		
an electrically conducting fluid supply for directing	Reference No. 70 discloses an electrically		
electrically conducting finid to the target site such	restriction for to obcooks an electrically		
that	conducting fluid supply for directing electrically		
•••	conducting fluid to the target site, see, a.g., col. 3.		
the all-of-the section 2. A 2.1	line 1.		
the electrically conducting third generates a current	In Reference No. 70 the electrically conducting		
flow path between the return electrode and the	fluid generates a current flow path between the		
cieculooc terminal.	return electrode and the electrode terminal, see, e.g.,		
	col. 3, line 1,		

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The '536 Palent	Reference No. 71		
45. An electromagical system for applying electrical energy to a target site on a structure within or on a patient's body, the system compraine:			
a high frequency power supply	Reference No. 71 discloses a high frequency power supply, sea, e.g., col. 3, line 43 - col. 4, line 18.		
an electrosurgical probe comprising a shall having a proximal end and a distal end,	Reference No. 11 discloses an electrosurgical prob comprising a shaft having a proximal end and a distal end, acc, e.g., figs.		
an electrode terminal disposed near the distal end, and	Reference No. 71 discloses an electrode terminal disposed near the distal end, nec, n.g., figs.		
a connector pear the proximal and of the shaft electrically coupling the electrode terminal to the electrosurgical power sopply;	Reference No. 71 discloses a connector pear the proximal end of the shall electrically coupling the electrode terminal to the electrossurgical power supply, see, e.g., figs.		
E return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 71 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 3, line 43 - col. 4, line 48.		
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that			
the electrically consucting fluid generates a current flow path between the return electrode and the electrode tenoinal.			
	2423882		
The '536 Patent	Reference No. 72		
45. An electrosuggical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:			
a high frequency power supply:	Reference No. 72 discloses a high frequency power supply, see, e.g., cot. 2. June 30.		
an electrosurgical probe comprising a shall having a proximal end and a distal end,	Reference No. 72 discloses an electrosurgical prob comprising a shall having a proximal end and a distal end, see, e.g., col. 2, line 30.		
en electrode terminal disposed near the distal end, and	Reference No. 72 discloses an electrode terminal dispated near the distal end, see, e.g., col. 2, line 3		
connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power aupphy;	Reference No. 72 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply, see, e.g., col. 2, line 30.		
a return electrode electrically coupled to the electrosurgical power supply, and	Reference No. 72 discloses a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 2, line 30.		
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that			
he electrically conducting that generates a current low path between the return electrode and the			

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The 536 Patent	Reference No. 73	
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the system comprising:		
a high frequency power supply;	Reference No. 73 discloses a high frequency power supply, see, e.g., col. 4, line 35.	
an electrosurgical probe comprising a shaft having a proximal end and a dictal end,	Reference No. 73 discloses an electrostrated probe comprising a shall beying a proximal and and a distal end, see, e.g., col. 4, line 35.	
an electrode terminal disposed near the distal end,	Reference No. 73 discloses an electrode terminal disposed near the distal end, see, e.g., col. 4, line 35.	
a connector near the proximal end of the shaft electrically coupling the electrode terroinal to the electronugical power supply;	Reference No. 73 discloses a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosus giral power supply, see, e.g., col. 4, line 35.	
a return electrode electrically coupled to the electrosurgical power supply; and	Reference No. 73 disclores a return electrode electrically coupled to the electrosurgical power supply, see, e.g., col. 4, line 35.	
an electrically conducting fluid to the target site such electrically conducting fluid to the target site such that		
the electrically conducting fluid generates a current flow path between the return electrode and the electrode terminal		

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UNITED STATE PARTMENT OF COMMERCE Patent and Trades & Office

Address: ASSISTANT COMMISSIONER FOR PATENTS

Washington, D.C. 20231

CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR I PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
90/005,601	DECEMBER 30, 1999	5,697,536	16238-00610

ARTHROCARE CORPORATION 680 VAQUEROS AVENUE SUNNYVALE CA 94085-3523 EXAMINER

ART UNIT PAPER

MENDEZ, M. 13

DATE MAILED: NOVEMBER 15, 2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

COURTY THE SOURCE

commissioner of Patents and Trademarks

cc: William C. Fuess, 3rd party. attorney

or Arian End (Para Arian	Control No. 90/005,601	Patent Under Re	examination
Office Action in Ex Parte Reexamination	Examiner Manuel Mendez	Art Unit 3763	
- The MAILING DATE of this communication ap	pears on the cover sheet wi	th the correspondence add	ress
a Responsive to the communication(s) filed on 19 June 2 c A statement under 37 CFR 1,530 has not been receive	d from the patent owner.	is made FINAL	
A shartened statutory period for response to this action is sa Failure to respond within the period for response will result it certificate in accordance with this action. 37 CFR 1.550(d). If the period for response spec	n termination of the proceedin EXTENSIONS OF TIME ARE	g and issuance of an ex part GOVERNED BY 37 CFR 1	550(c)
Part 1 THE FOLLOWING ATTACHMENT(S) ARE PART OF	OF THIS ACTION:		
Notice of References Cited by Examiner, PTO-	892. 3, 🗌 Interview	Summary, PTO-474.	
2. Information Disclosure Statement, PTO-1449.	4. See Cor	tinuation Sheet.	
Part II SUMMARY OF ACTION ,			*
1a. 🛭 Claims <u>1-64</u> are subject to reexamination.	•		
1b. Claims are not subject to reexamination.			
Claims have been canceled in the prese	nt reexamination proceeding.		
3. Claims are patentable and/or confirmed.			
🙀 🛭 Claims <u>1-64</u> are rejected.			
6 Claims are objected to.			
The drawings, filed on are acceptable.			
7. The proposed drawing correction, filed on	_has been (7a) approved	(7b) disapproved.	
Acknowledgment is made of the priority claim u a All bi Some c None of the ce t been received. 2 not been received. t 3 been filed in Application No.	nder 35 U.S.C. § 119(a)-(d) o	r (I)	
= 1) All b) Some c) None of the co	rtified copies have		
. IT 1 been received.			
2 not been received.			
A 3 been filed in Application No		*	
. 4 been filed in reexamination Control No.			•
5 been received by the International Bureau	in PCT application No		
* See the attached detailed Office action for a list	of the certified copies not re-	elved.	
 Since the proceeding appears to be in condition matters, prosecution as to the merits is closed in 11, 453 O G. 213. 			
10 Other:		•	
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ce: Requester (if third party requester)			

DETAILED ACTION

Introduction

The prosecution of Reexamination No. 90/005,601 originated with the filing of a Reexamination Request on December 30, 1999. The Request indicated that the requester considered claims 1-3, 14, 16, 22, 27, 30, 33, 38, 41–48, 55, 57, 60, and 63, of Eggers, et al., U.S. Patent Number 5,697,536, referenced hereafter as Eggers '536, as being anticipated by Roos, U.S. Patent Number 4,116,198, referenced hereafter as Roos '198. After a complete review of the merits of the Request, the examiner of record concluded that Roos '198 raised a substantial question of patentability.

Consequently, an order granting the Request for Reexamination was mailed on February 2, 2000. The order was mailed for a second time on October 27, 2000.

The arguments presented by the Request concerning Roos '198 were addressed in a final decision by the examiner of record and reviewed by a board of primary examiners that convened to analyze the decision and make a final determination. However, before the mailing of the written decision, a new Information Disclosure Statement (IDS) was timely received on June 19, 2002. The IDS comprises of evidentiary documents pertinent to pending litigation at the United States District Court in the State of Delaware (Arthrocare Suit-Delaware, USDC-D. DEL.-C.A. No. 01-504-

SLR).

In view of the new documents submitted by the IDS, the examiner of record has decided to divide this prosecution in two sections. The first section addresses the issues originally presented by the Request concerning Roos '198 and summarizes the patentability conclusion as it was decided by the examiner of record prior to the receipt of the new IDS. Finally, the second section addresses new relevant references as listed in the IDS received on June 19, 2002, and more specifically, the Supplemental Invalidity Response included in the submitted IDS package.

Section I: Analysis of the Roos Patent

After carefull consideration and review of Roos 198, it is hereby found that Roos 198 does not anticipate or render obvious any of the independent claims of record for a variety of reasons that will be discussed below.

Interpretation of the Preamble

The preamble of claim 1, discloses an electrosurgical system for use with a high frequency power supply and an electrically conducting fluid supply. It is noted that whether a preamble constitutes a limitation to a claim is a matter to be determined by the facts of each case in view of the claimed invention as a whole. See, In re Stencel, 828 F.2d 751, 4 USPQ2d 1071, 1073 (Fed. Cir. 1987). Additionally, the preamble of a claim does not limit the scope of the claim when it merely states intended use of the invention. In re Pearson, 494 F.2d 1399, 1403, 181 USPQ 641, 644 (CCPA 1974).

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meaning to the invention claimed. Gerber Garment Technology, Inc. v. Lectra Syst., Inc., 916 F.2d 683, 688, 16 USPQ2d 1436, 1441 (Fed. Cir. 1990) (quoting) PerkinsElmer Corp. v. Computervision Corp., 732 F.2d 888, 896, 221 USPQ 689, 675 (Fed.
Cir.), cert. Denied, 469 U.S. 857 (1984). Although no "filmus test" exists as to what
effect should be accorded to terms appearing in a preemble, a patent application in its
entirety should be reviewed to determined whether the inventors intended such
language to represent additional fimilations or mere introductory language. See, e.g., in
re Paulsen, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1673-74 (Fed. Cir. 1994) (Citing
Coming Glass Works v. Suitomo Elect. U.S.A., Inc., 868 F.2d 1251, 1257, 9 USPQ2d
1965, 1965 (Fed Cir. 1989).

Accordingly, a review of the specification in Eggers '536, reveals in column 4, lines 63-67, that figure 1 is a perspective view of the electro surgical probe, an electrically conducting liquid supply and an electro surgical power supply. Electrically conducting liquid (50) is shown in figure 1 within an IV bag and in fluid communication with the electro surgical probe (10) as shown in figures 2A and 2B. Moreover, in column 12, lines 26-28, the specification states that electrically conducting liquid (50) (e.g., isotonic saline) is caused to flow along the fluid paths (83).

In view of the foregoing, the phrase 'an electrically conducting fluid supply' in the preamble of claim 1, must be interpreted in view of the specification as a limitation disclosing a medical container (e.g., IV bag) that stores electrically conducting incuid

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(50) such as isotonic saline. The medical container is in fluid communication with the probe (10) allowing the electrically conducting liquid to make contact with the electrodes at the distal end of the probe (10). Additionally, in the last portion of claim 1, the phrase "the fluid path having an inlet adapted to be fluidly coupled to the electrically conductive fluid supply" unequivocally suggests that the drafter intended the preamble phrase "an electrically conducting fluid supply" to be a structural limitation. Clearly, the phrase "an electrically conducting fluid supply" gives life and meaning to the invention claimed, and therefore, must be considered in the assessment of patentability of claim 1.

Assessment of Patentability

The Roos '198 Patent never describes the use of "electrically conductive fluid" during electrosurgery. The Roos '198 Patent only discloses the use of an unspecified 'washing liquid" that flows through the endoscope that houses the treatment and neutral electrodes. See Roos '198 Patent at 4:51-57, Fig. 1. The Roos '198 Patent does not state that the 'washing liquid" that is supplied to the region of the surgical site is electrically conductive fluid. This omission is significant, because numerous non-conductive washing liquids, such as distilled water, glycine, sorbitol, and the like, have been used in electrosurgery and are still in use today. See, e.g., U.S. Patent No. 4,936,301 to Rewroth, et al. at 1:62-64 and 2:4-7.

In fact, the Roos '198 specification makes clear that the "washing liquid" delivered to the surgical site in the Roos '198 Patent is not electrically conductive. The

Roos '198 Patent states at column 6, lines 51-53 that 'the neutral electrode 11 in the form of a steet band rests on the tissue in large area form, so that good electrical contact is ensured." If the "washing liquid" was electrically conductive, there would be no need for the neutral electrode to rest on the tissue in large area form to ensure good electrical contact. Electrical contact between the neutral electrode and the cutting electrode would be ensured by the "washing liquid" itself. The statement in the Roos '198 Patent that tissue contact with the neutral electrode is needed to ensure electrical contact plainty shows that the "washing liquid" described in the Roos '198 Patent good not have been electrically conductive.

A later-issued patent to the same named inventor, U.S. Patent No. 4,706,667, referenced hereafter as Roos '667, demonstrates unequivocally that the "washing liquid" disclosed in the Roos '198 Patent was not electrically conductive. The Roos '198 Patent claims priority to German Patent Application No. 2521719, referenced hereafter as "German Patent Application". The Roos '657 Patent explains at column 1 lines 14-29 that the device described in the German Patent Application (and thus in the Roos '198 Patent) did not work to cut tissue because the medium in contact with the electrodes was not electrically conductive:

"In a known electro-surgical high frequency cutting instrument of this kind (DE-OS No. 25 21 719) the neutral electrode is admittedly arranged in the immediate vicinity of the cutting electrode, it is however so separated from the tissue by a plastic cover, or NONTER TOWNSONS

by its arrangement in an endoscope, that it can only enter into electrical contact with the cutting electrode electrolytically via the secretion which is present during the cutting process. As a result, it is difficult to maintain the current intensity required for trouble free cutting in a required precisely defined manner at the cutting electrode. Thus, if the power setting at the r.f. generator is too high, burns can result or, if the power setting is too low, then a poor cut or indeed injury occurs because the tissue to be cut sticks to the cutting electrode as a result of congulation processes.

According to the Roos '657 Patent, the device disclosed in the parent application to the Roos '198 Patent (and thus in the Roos '198 Patent itself) did not work because there was insufficient electrical contact between the neutral and cutting electrodes to cut tissue, even though the electrodes were in the "immediate vicinity" of one enother. If the Roos '198 Patent had delivered electrically conducting fluid to the tissue site, such as isotonic saline, then the Roos '667 Patent surely would not have stated, as it did, that the cutting and neutral electrodes "only enter into electrical contact" with each other "via the secretion which is present during the cutting process." If Roos '198 had delivered electrically conducting fluid to the tissue site, there would have been an electrical connection between the cutting and neutral electrodes by virtue of the electrically conducting fluid itself, regardless of whether bodily secretions were present. Plainly, Roos '198 used non-conducting 'washing liquid" and attempted to rely on bodily secretions from the cutting process to make the non-conductive "washing liquid" more

conductive. According to the Roos '667 Patent, these secretions did not make the nonconductive "washing liquid" electrically conductive.

Significantly, the Roos '667 Patent did not solve the electrical contact problem described in the Roos '198 Patent by introducing electrically conducting fluid to the tissue site. Rather, the Roos '667 Patent solved the problem of poor conductivity by disclosing a device in which both the cutting and neutral electrodes were in physical contact with the tissue so that current could flow from the cutting electrode, through line tissue, and to the return electrode, not through electrically conducting fluid. The Roos '667 Patent explains at column 4, line 30:

"The instrument is first of all placed in accordance with FIG. 1 onto the tissue 16 which is to be separated by means of a cut, with a concave ring-like contact surface 14 being formed between the tissue 16 and the neutral electrode 11 and with a very small funnel-like contact surface 15 being formed between the tip of the cutting electrode 12 and the tissue 16. If the r.f. generator is now switched on then an r.f. current indicated by the current lines 28 flows between the cutting electrode 12 and the neutral electrode 11".

In conclusion, because the Roos '198 Patent does not disclose or enable electrosurgical ablation in the presence of electrically conductive fluid, it cannot anticipate claims 1, 45, and 63, containing such an element. PPG Indus., Inc. y.

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<u>Guardian Indius. Corp.</u>, 75 F.3d 1558, 1566 (Fed. Cir. 1996) ("To anticipate a claim, a reference must disclose every element of the challenged claim and enable one skilled in the art to make the anticipating subject matter.").

Section II: References disclosed in the IDS dated June 19, 2002

Claim Rejections

In order to expedite the prosecution of this reexamination, the examiner of record will make direct references to the Supplemental Invalidity Response (Arthrocare Suit-Delaware, USDC-D. DEL.-C.A. No. 01-504-SLR) submitted with the IDS package dated .tune 19, 2002.

35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the Invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a paisent granted on an application for patent by another filed in the United States before the invention thereof by the applicant (or patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarity

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Page 10

published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Malley, et al., reference no. 3. Please refer to page 2 of Supplemental Invalidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Curtiss, reference no. 9. Please refer to page 5 of Supplemental Invalidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Piercy, et al., reference no. 12. Please refer to page 6 of Supplemental Invalidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Dennis, et al., reference number 16. Please refer to page 8 of Supplemental Invalidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Barry, et al., reference number 21. Please refer to page 10 of Supplemental Invalidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Swain, et al., reference number 24. Please refer to page 12 of Supplemental Invalidity
Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Malis, et al., reference number 28. Please refer to page 14 of Supplemental Invalidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Pao, reference number 35. Please refer to page 17 of Supplemental Invalidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anlicipated by Tucker, et al., reference number 37. Please refer to page 18 of Supplemental Invalidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anlicipated by Lee, et al., reference number 38. Please refer to page 18 of Supplemental Invalidity Response.

Cleims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 90/03152, reference number 43. Please refer to page 21 of Supplemental Invalidity Response.

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Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Stasz, reference number 46. Please refer to page 22 of Supplemental Invalidity Response,

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Reimels, reference number 52. Please refer to page 25 of Supplemental Invalidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Olsen, reference number 57. Please refer to page 28 of Supplemental Invalidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohlomo, et al., reference number 66. Please refer to page 32 of Supplemental Invalidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Rydwell, et al., reference number 67. Please refer to page 32 of Supplemental fromidity Response.

Claims 1-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Komerling, reference number 70. Please refer to page 34 of Supplemental Invalidity. Response.

Claim Rejections - 35 USC § 103

On page 8 of the Supplemental Invalidity Response, it is alteged that claim 45 of Eggers '536 would have been obvious to one of ordinary skill in the art at the time of the invention in view of at least each of the following combinations. Please refer to the table on pages 1-8 of the Supplemental invalidity Response to identify the patent/publication number, inventor/author, and title,

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20003502 This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one or more of references 1, 4, 5, 6, 7, 10, 11, 13, 17, 30, 33, 40, 44, 50, 55, 56, 60, 61, A00028001

69, 71, 72, 73 in view of any one or more of references 3, 9, 12, 16, 21, 24, 28, 36, 37, 38, 43, 46, 52, 57, 66, 67, 70. According to the allegations of unpatentability disclosed on page 8 of the Supplemental Invalidity Response, it would have been obvious to modify any one or more of references 1, 4, 5, 6, 7, 10, 11, 13, 17, 30, 33, 40, 44, 50, 55, 56, 60, 61, 69, 71, 72, 73 with the enhancements taught by 3, 9, 12, 16, 21, 24, 28, 36, 37, 38, 43, 46, 52, 57, 66, 67, 70, because "each reference is directed to the same problem-Applying electrical energy to a target site on a patient's body structure".

Accordingly, all modifications to the base references following the teachings of the secondary references listed above, are considered obvious design choices.

Claims 1-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one or more of references 2, 34, and 47, in view of any one or more of references 3, 9, 12, 16, 21, 24, 28, 36, 37, 38, 43, 46, 52, 57, 66, 67, 70. According to the allegations of unpatentability disclosed on page 8 of the Supplemental invalidity Response, it would have been obvious to modify any one or more of references 2, 34, and 47 with the enhancements taught in references 3, 9, 12, 16, 21, 24, 28, 36, 37, 38, 43, 46, 52, 57, 66, 67, 70, because "each reference is directed to the same problem-Applying electrical energy to a target site on a patient's body structure". Accordingly, all modifications to the base references following the teachings of the secondary references listed above, are considered obvious design choices.

Claims 1-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over reference 59 in view of any one or more of references 3, 9, 12, 16, 21, 24, 28, 36, 37, 38, 43, 46, 52, 57, 66, 67, 70. According to the allegations of unpatentability disclosed on page 9 of the Supptemental Invalidity Response, it would have been obvious to modify reference 59 with the enhancements taught in references 3, 9, 12, 16, 21, 24, 28, 36, 37, 38, 43, 46, 52, 57, 66, 67, 70, because "each reference is directed to the same problem-Applying electrical energy to a target site on a patient's body structure". Accordingly, all modifications to the base references following teachings of the secondary references listed above are considered obvious design choices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel Mendez whose telephone number is 703-308-2221. The examiner can normally be reached on 0730-1800 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Brian Caster can be reached on 703-308-3552. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3590 for regular communications and 703-305-3590 for After Final communications.

September 24, 2002

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Mariuel Mendez Primary Examiner Art Unit 3763

Kabe Zarzana

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hereby centry that this correspondence is being deposited with the United States Postal Service Excress Mail Post Office to Addressee service under 37 CFR 1.10 on the date indicated below, Express Mail No. EU627186385 and is addressed to Assistant Commissioner for Patents,

Washington, D.C. 20231 Xrimber 19 David

PATENT Attorney Docket No.: RE-EXAM - 1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: EGGERS et al.

Reexamination of U.S. Patent No.: 5.697,536 Reexamination No.: 90/005,601 Reexamination Filed: December 30, 1999

Patent Filed: November 18, 1996 · Patent Issued: December 16, 1997

Assistant Commissioner for Patents Washington, D.C. 20231

FOR: SYSTEM AND METHOD FOR ELECTROSURGICAL CUITING AND ABLATION .

WRITTEN STATEMENT PER 37 C.F.R. 61.560(b)

LECHNOLOGY CENTER R3700

Examiner: Manuel Mendez

Art Unit: 3763 >

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Sir:

This statement is made pursuant to 37 C.F.R. §1.560(b). As per M.P.E.P. §2281, this Statement is timely filed.

Statement Regarding Communications between the Office and John Raffle

John Raffle, attorney for Patentee, discussed U.S. Patent No. 4,116,198 to Roos ("Roos") with Examiner Mendez. Examiner Mendez expressed his opinion that the Roos patent is not prior art and that he would set forth his opinion in writing. Mr. Raffle expressed Patentee's position that the Roos patent is not prior art. In addition, Mr. Raffle expressed the Patentee's view that the Roos patent does not disclose electrically conducting fluid. Mr. Raffle also discussed the existence of a later filed patent

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EGGERS et al.

Reexamination of U.S. Patent No.: 5,697,536

Reexamination No.: 90/005,601

Page 2

application to Roos (that issued as the '667 patent) which pointed out that the device disclosed in the Roos patent did not work because it did not use an electrically conducting fluid. Mr. Raffle also understood that the Roos patent was known to Examiner Mendez through his examination of commonly assigned patent applications.

Mr. Raffle also discussed a memorandum decision filed by Judge Ornick on December 2, 1998 in a lawsuit in the United States District Court for the Northern District of California between ArthroCare Corp. (as plaintiff) and Ethicon, Inc., Mitch Surgical Products, Inc., and Gynecare, Inc., (collectively as defendants) ("Ethicon litigation"). Mr. Raffle generally explained that Patentee sought a preliminary injunction in the Ethicon litigation, what a preliminary injunction is; what the decision meant in terms of the case; and that Judge Ornick denied Patentee's motion for a preliminary injunction. Mr. Raffle also provided a copy of the memorandum decision to Examiner Mendez. Mr. Raffle also told Examiner Mendez that Judge Ornick made a preliminary finding based on Roos and explained the importance of the Roos patent in the Ethicon litigation. On or about January 31, 2001, Examiner Kashnikow telephoned Mr. Raffle and asked that he provide him with the order granting the request for reexamination of the '536 patent.'

Statement Regarding Communications between the Office and Saniay Bagade

In May 2002, Examiner Mendez contacted Sanjay Bagade, attorney for Patentee, regarding claim 1. Examiner Mendez indicated that the Office found the claims allowable over the Roos patent, but questioned whether the phrase "an electrosurgical system for use with a high frequency power supply and an electrically conducting fluid supply" should be moved from the preamble of claim 1 to the body of the claim. Mr. Bagade stated his opinion that such an amendment was not appropriate. At Examiner Mendez's suggestion, Examiner Mendez, Mr. Bagade, and Examiner Brian Caster conducted a telephone interview to discuss whether the claim required such an amendment. During the interview, Examiner Mendez, Examiner Caster, and Mr. Bagade primarily discussed various court decisions (as cited by Examiner Mendez in the Office Action.) At the conclusion of the interview, the parties agreed that an amendment to the

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Reexamination of U.S. Patent No.: 5,697,536

Regxamination No.: 90/005,601

Page 3

claim was not necessary for the limitation to be considered in the assessment of natentability of the claims.

Statement Regarding Various Communications between the Office and John Raffle/Saniay Bagade Regarding Status of the Reexamination

Both Mr. Raffle and Mr. Bagade have contacted either Examiner Mendez, Examiner Casler, or Examiner Kashnikow regarding various matters, including the status of the reexamination proceedings, various procedural matters regarding reexamination proceedings, and an estimation of when the Office would provide a first office action.

The reexamination proceeding was filed on December 30, 1999. As a result, the attorneys for the Patentec have made requests for the Office to issue an office action so that a timely response could be filed on the behalf of the Patentee. During these communications, either Mr. Raffle or Mr. Bagade have discussed various administrative issues such as the filing of information disclosure statements or the procedures for review of an office action in reexamination proceedings.

The attorneys for the Patentee wish to express their gratitude to the Examiners for their cooperation in providing information regarding the reexamination proceedings. The attorneys for Patentee respectfully request expedited review of this statement and accompanying response.

Respectfully submitted,

Sanjay S. Bagade Reg. No. 42,280

ArthroCare Corporation 680 Vaqueros Ave. Sunnyvale, CA 94085-3523 (408) 736-0224

I hereby certify that this correspondence is being deposited with the United PATENT States Postal Service Express Mail Post Office to Addressee service under 37 CFR 1.10 on the date indicated below, Express Mail Label No. EU627186305 Attorney Docket Proand is addressed to: Assistant Commissioner for Palents. Washington, D.C. 20231

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER

RECEIVED JAN 0 2 2003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE PHOLOGY CENTER FROM

Art Unit: 3739

Examiner: M. Mendez

37 CFR §1.97 and §1.98

In re Patent of

PHILIP E. EGGERS et al. .

Application No. 90/005.601.

Reexamination of Patent No.: 5,697,536

Issued: December 16, 1997

or: System and Method for LECTROSURGICAL CUTTING AND BLATION

Assistant Commissioner for Patents Washington, D.C. 20231

The references cited on attached form PTO-1449 are being called to the attention of the Examiner. These references were brought to Applicant's attention through the Smith & Nephew litigation referred to in the previously submitted IDS. Also being submitted are the following documents:

- Correspondence from Kurtis MacFerrin to Persy Clark dated September 10, 2002 with Exhibit A (2 pgs), Exhibit B (11 pgs), Exhibit E (3 pgs).
- Correspondence from Kurtis MacFerrin to Perry Clark dated October 9, 2002 with Exhibit A (2 pgs), Exhibit B (22 pgs), Exhibit E (7 pgs).
- File History of U.S. Patent No. 4,116,198 Roos.

If the Examiner believes a telephone conference would expedite prosecution of this reexamination, please call the undersigned at (408) 735-6323.

Respectfully submitted,

Sanjay S. Bagade Reg. No. 42,280

ArthroCare Corporation 680 Vaqueros Ave. Sunnyvale, CA 94085 (408) 736-0224

SUPPLIED TO THE FORE

	449 (Modified)	·	Attorney Docket No. 16238-000610	Patent N	io.: 5,697	,536
	TENTS AND PUBLIC S INFORMATION D			-		•
STATEMENT	sheets if necessary					
1032 0016303		•	Applicant: PHILIP E.	EGGERS et	al.	
			1ssue Date: December 16, 1997.	Group:		
Reference 1	Designation	U.S.	PATENT DOCUMENTS	·		
Examiner Initial	Document No.	Date	Hatte	Class	Sub- class	Filing Date
AA						
AB			•			
AC						
AD		-				
AE						
AF						
		··· FOREI	ON PATENT DOCUMENTS			
			·			Translation (yes/no)
AG	· .					
AH						
· 71						
	OTHER ART (including Author	or, Title, Date, Perti	ent Page	s, Etc.)	
NJ ·	Correspondence 1991 (3pgs)	from C. Larso	n Dept. of Health & Hu	man Servi "	ces dated	April 22.
AK	Summary of Saf	ety and Effect	ive Information (2pgs)			
AL	Correspondence 12, 1985	from R. Brita	in Dept. of Health & H	uman Sery	ices date	d August .
Ан	Correspondence	from J. Malis	Valley Forge dated Ju	ly 25, 19	85 (3pgs)	
AN	L. Malis J. New	urosurg. Vol.	85, pp. 978-975 (1996)			
AO	Excerpt from se Surgeons Meetin		alis, MD 1995 America	n Assoc.	of Neurol	ogicla .
AP	L. Malis The Va	lve of Irriga	tion During Bipolar Co	agulation	(3pg)	
AQ.	L. Malis New To	ends in Micro	surgery and Applied Te	chnol ogy	(pgs 9-16	:)
AR	Codman Bipolar	Electrosurger	Products brochure (8	pgs)		
AS	The MALIS Bipol	ar Coagulatin	and Hipolar Cutting	System CM	C-II bro	chure
AT	"Valley Forge's	new products	Clinica Vol. 475, p.	5 (1991)		
AU			gical Systems CMC-II (0-1170) 3	4 pgs
EXAMINER			ONSIDERED			

EXMINER: Initial if reference considered, whether or not citation in in conformance with NMEP 609; Braw like through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CERTIFICATE OF SERVICE

I hereby certify that on this 19th day of December, 2002, a true and correct copy of the documents listed below were caused to be served on the attorneys of record at the following addresses as indicated:

- 1. Written Statement Per 37 CFR 1.560(b)
- 2. Response to First Office Action
- 3. Affidayit under 37 CFR 1.132
 - Supplemental Information Disclosure Statement, Form PTO-1449 and copies cited documents.

JAN 0 2 2003

TECHNOLOGY CENTER R3700

BY U.S. POSTAL SERVICE FIRST CLASS MAIL

William C. Fuess

CFUESS & DAVIDENAS

G10951 Sorrento Valley Road, Suite II-G

San Diego, CA 92121-1613

H

Executed on December 19, 2002 at Sunnyvale, California.

atic Zarzana

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FISH & RICHARDSON P.C.

Frederick P. Fish 1855-1930 W.K. Richardson 1859-1951

BY FAX AND MAIL

September 10, 2002

Perry Clark, Esquire Weil, Gotshal & Manges LLP 201 Redwood Shores Parkway Redwood Shores, CA 94065

Re: Arthrocare Suit - Delaware USDC-D, Del. - C.A. No. 01-504-SLR

Dear Perry:

500 Arguello Street Suite 300 Bedwood City, Cali \$406)-1526

Telephone

Facaimile 650 \$39-5071

650 139-5070

Very truly yours,

50107265

Kurtis MacFerrin

cc: Jack B. Blumenfeld, Esq., Morris, Nichols, Arshi & Tunnell

M.

ELLYARE
ELLYARE
PIEV TOOK
EN BIRCO
LOOK YALLET
TOOK CATIES
HEMOTON, BC

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Exhibit A:
Prior art references upon which Smith & Nephew presently intends to primarily rely.

-	#.,	Issue/ Pub'n Date	Patent Number/ Publication	Inventor/Author	Title
	8	00/00/76	Acta Medicotechnica (Medizinal- Markt), Vol. 24, No. 4, 1976 129 134	E. Elsasser and E. Roos	Uber ein Instrument zur leckstromfreien transurelbralen Resection (Concerning An Instrument for Transurethral resection without leakage of, current)
	10	07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
٠	15	09/26/78	US 4,116,198 and its file history	Eberhard Roos	Electro-Surgical Device
	22	04/27/82	US 4,326,529	James D. Doss and Richard L. Hutson	Corneal-Shaping Electrode
42.27.4	1. 123	04/26/83	US 4,381,007	James D. Doss	Multipolar Comeal-Shaping Electrode with Flexible Removable Skirt
Charles it will grade to the contract of	26	06/00/85	JACC Vol. 5, No. 6, 1382-6	Comelis J. Slager, MSc, Catharina E. Essed, MD, Johan CH. Schourbiers, BSc, Nicolaas Bom, Ph.D, Patrick W. Sernys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
	29	00/00/87	Kardiologie, Kardiol.76: Supp. 6, 67-71 (1987)	C.J. Slager, A.C. Phaff, C.E. Essed, J.C.H. Schuurbiers, N. Born, V.A. Vandenbroucke, and P.W. Serruys	Spark Erosion of Arteriosclerotic Plaques
	31	06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
•	32	07/00/88.	Valleylab Part Number 945 100 . 102 A	Valleylab, Inc.	Surgistat Service Manual

	_			
Ħ	Issue/ Pub'n Date	Patent Number/ Publication	Inventor/Author	Title
34	00/00/89	SPIE Vol. 1068 Catheter-based Sensing and Imaging Technology	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback
36	02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
38	04/00/89	JACC Vol. 13 No. 5, 1167-75	Benjamin I. Lee, MD, FACC, Gary J. Becker, MD, Bruce F. Waller, MD, FACC, Kevin J. Barry, MS, Raymond J. Conrolly, Ph.D. Jonathan Kaplan, MD, Alan R. Shapiro, MS, Paul C. Nardella, BS	Thermal Compression and Molding of Atherosclerotic Vascular Tissue With Use of Radiofrequency Energy: Implications for Radiofrequency Balloon Angioplasty
48	12/11/90	US 4,976,711	David J. Parins, Mark A. Rydell, Peter Stasz	Ablation Catheter With Selectively Deployable Electrodes
51 12	04/16/91	US 5,007,908	Mark A. Rydell	Electrosargical Instrument Having Needle Cutting Electrode And Spot-Coag Electrode
J52	04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical Instrument

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Exhibit B:

Examples of where each limitation of the dependent claims of the '536 patent may be found in each reference.

claim text\reference	1 1	· 2	3	1 4	5	. 6	7
46. An electrosurgical system as				+-		-	
	1 .		1	1	١.	1	
in claim 45, wherein	 	⊢∸	 			 	
he return electrode forms a	1	J ·	1 .	1			
portion of the shaft of the	4:9-24		1	1		• •	Fig. 2
electrosurgical probe.	<u> </u>						
47. An electrosurgical system as	1				•	1 • .	1
in claim 46 further including	ſ		1 .	1		1	
·				<u> </u>		<u> </u>	·
an insulating member	1		1	1		l '	
circumscribing the return			Ι.	1 : '	1		3:58-61
electrode,			<u></u>	٠.	ļ	<u> </u>	
the return electrode being						1	
sufficiently spaced from the	J	٠.			;		1.1
electrode tenninal to minimize	l	Ι.	١.		· ·		
direct contact between the return	1 ' '		Ι.	1.	l .		
electrode and the patient's]	ļ	1 '	l'			
issue.			ľ	<u> </u>	i	Γ	
55. The electrosurgical system	l .			T .			7
of claim 45 wherein					* *		- 1
the electrode terminal comprises			. 34.			. ; ,,,,	
a single active electrode	1:40-55	206	8:10:9:8	3:10-28	58	2:54-57	
disposed near the distal end of	1:40-55	206	\$210:9:8	3:10-28	J 38 .	234-37	2:67-3:16
the shaft.		1			L		
56. The electrosurgical system				T		· ·	
of claim 45 wherein	• • •						
the target site is selected from							
the group consisting essentially	•	٠.	1	l.	1		'
of the abdominal cavity.			l	· ·	l		
thoracie cavity, knee, shoulder,						.1:45-58	
hin hand, foot, elbow, mouth,	1.7		, ";		·	. 1.43-30	
spirit ear, oose, throat,				: • •	ş.	•	
enidermis and dermis of the			ĺ		Ι'		
nation's body					<u> </u>		
S8. The electrosurgical system							
of claim 45 wherein	1				l .		-
the frequency of the voltage				•			
applied between the return .				Ι΄.			
electrode and the electrode		206-07	3:49-4:14	Ι.	58		
terminal is in the range of about							
20 kHz and 20 Mhz.	- : :			Ι΄.			
59. The electrosurgical system							
of claim 45 wherein				1		١ ٠	- 1
the voltage applied between the			·	· · · · ·			
electrode terminal and the return			- 0	· . · · ·		1. 1	
electrode is in the range from 10		211			58.		
velts (RMS) to 1000 volts		.***			_*··		1
(RMS) to 1000 volts				1	-		
(RMS)	· · - 1						1

Exhibit B:

Examples of where each limitation of the dependent claims of the '536 patent may be found in each reference.

claim text \ reference	8	9	10	11	12	13	14
46. An electrosurgical system a	15		1	1	T		
in claim 45, wherein		l	1	l			
the return electrode forms a		1 .		1	1		
pertion of the shaft of the .	7		4:31-43	2			ï
electrosurgical probe.	.1		1 .	l			
47. An electrosurgical system a	5 .				1.		1
in claim 46 further including	1			ł	ľ	1	1
!	1			l -	1		1
an insulating member .				1			
circumscribing the return	1 .	ł	5:50-57	3.		Ί	1
electrode,		l	1 '		l .	1	ł
the return electrode being	1 —		1			-	
sufficiently spaced from the	1			ı	l	1 .	1
electrode terminal to minimize	1 4		l	Į.	1 7	1 .	
direct contact between the return	4 "	1	ļ	1		1 .	1
electrode and the patient's	ŀ	i	1	i	i	· '	1
rissue.	1_	l	l .	1		l	1
55. The electrosurgical system							<u> </u>
of claim 45 wherein		, 1	1				١.
the Hoctrode terminal comprises						_	1
a single serive electrode	7	7:58-68	4:44-64	3	- 530	6:45-54	1.0
disposed near the distal end of	1 1	1:70-00	4,44-04	,	- 230	6:43-54	ſ
the sliaft.	L		!				
56. The electrosurgical system		-					
of claim 45 wherein			i			1	
the larget site is selected from						-	
the group consisting essentially						1	
of the abdominal cavity.				- 1			
theracic cavity, knee, shoulder,	11	0.0479167	۱ . ا	2	527		l '
hip,Tand, foot, elbow, mouth,		0.0177107		- 1	321	(·	
spirit ear, nose, throat,	i J			.	•	l	
epidermis and dermis of the				.		1	/ c
nationt's hosty			'	.			
58. The electrosurgical system							
of claim 45 wherein			1	- 1			
the frequency of the voltage							
applied between the return	- 1		- 1	. [
electrode and the electrode	0	1:34-53		.		١. ١	
terminal is in the range of about		••	1			,	
20 kHz and 20 Mhz				. 1	1	l J	
59. The electrosurgical system							
of claim 45 wherein	-	- 1	-1		. 1		
the voltage applied between the							
lectrode terminal and the return		' 1		- 1	- 1		
electrode is in the range from 10	٠	1:34-53		- 1	J	. 1	7:26-42
volts (RMS) to 1000 volts			- 1	- 1	.	``.	1:2mml/

Exhibit B: Examples of where each limitation of the dependent claims of the '536 patent may be found in each reference.

claim text \ reference	15	16	17	18	, 19	20	21
46. An electrosurgical system as		1	1		1 .		
in claim 45, wherein		l.	_	l			}
the return electrode forms a	1	T .	1	1			
portion of the shaft of the	5:3-10		1	Ĭ .	2:34-46	2:35-58	l
electrosurgical probe.		· ·			1		
47. An electrosurgical system as				1	1		1
in claim 46 further including	I.		1 .		1.		1
LI CILLIA TO IMILITA MONGANIA	l •		,	1	ł	l	i
an insulating member		•	1:-	1		-	
circumscribing the return		Ι,	ľ. ·	ŀ	2:34-46	2:35-58	1
electrode.				l	22.10	2	l .
the return electrode being			· ·				
sufficiently spaced from the	1		: : : :	1	1 .		
electrode terminal to minimize	· ·	l			<i>i</i>	į .	. •
direct contact between the return	3:5-20	ŀ	1	t :			
electrode and the patient's	i	l	l	1	1	1	1
	٠				1	١.	l.
tissue. 55-The electrosurgical system	·					ı :	
of Elaim 45 wherein	:					1000	
the Electrode terminal comprises		-	.				
a single active electrode			l			1	
a strike active electrode disblised near the distal end of	*4:66-5:2	845	3:1-52	1:15-36	2:34-46	2:35-58	. 333
the Thaft.			1	١.			
567 The electrosurgical system			. ,:-		-		
of elaim 45 wherein	١.			ł	' . · ·		ŀ
the target site is selected from		<u> </u>	-			 ,	<u> </u>
the group consisting essentially				l '		١.	
of the abdominal cavity,		-	1		•		
thoracic cavity, knee, shoulder,		•		I		ļ. ·	l
hip, band, foot, elbow, mouth,	1:18-27	845	l 1	2:21-63		١٠.	334
spine, ear, nose, throat,		-	• •	,			
spine, car, muse, truest, epidermis and dermis of the	1		I ' ¹	ا : ۱]	
			· ·			à.	
nationt's body 58. The electrosurgical system					-		
of claim 45 wherein	••		1			l. •	
the frequency of the voltage		٠ .		-		***	
applied between the return	J			•	-		
appried between the return electrode and the electrode	. [: · ·	· 8:30-39	6:61-68	2:35-58	799
ejectrone and the electrone terminal is in the range of about	. I			, v:>0-39		-2:33-38	333 .
	· :	• . •			':	: .	
20 kHz and 20 Mhz. 59. The electrosurgical system		<u> </u>				·	
of claim 45 wherein	1		٠ -	1	1		
the voltage applied between the				<u> </u>			
	. 1	J	.	٠		· . ·	
lectrode terminal and the return		i		1	1		•
electrode is in the range from 10		- 1		8:30-39	5:46-6:7	2:35-58	333
volts (RMS) to 1000 volts	- 1				- 4		
RMS).		٠. ا		1	- 1		

Exhibit B:

Examples of where each limitation of the dependent claims of the '536 patent may be found in each reference.

claim text \ reference	22	23	24	25	26	27	28
46. An electrosurgical system as		, , , , , , , , , , , ,			1	l· 1	
in claim 45, wherein	1						
the return electrode forms a	1						
portion of the shaft of the	l	Fig. 1	į.			3:30-47	
electrosurgical probe.		1		l	-		
47. An electrosurgical system as		. 		-			
in claim 46 further including		1.		ľ	l .		
In Franti 40 titrates pictorare		1			J .	1	
an insulating member .							
circumscribing the return .	1 -	Fig. i-2				3:30-47	1
clectrode,			ŀ			١٠.	
the return electrode being	-				i	· ·	
sufficiently spaced from the		ı	l				*.
clectrode terminal to minimize					1.		
direct contact between the return	*- 1	2:42-68 -		1	1383	1	
	- 1	Ι΄.		!			1
electrode and the patient's	1 '		··.	٠.	1	[
tissue. 55. The electrosurgical system		l		1		-	
				. `			1.0
of claim 45 wherein			-				
the electrode terminal comprises		Fig. 9:3:29					
a simple active electrode	2:41-43	30	- 1425	. 100	1383	1:26-50	1:57-2:6
dispused near the distal end of		30	7	·-		1	
the shaft.		 		<u> </u>		-	
56. The electrosurgical system		١] .	
of citim 45 wherein							
the surget site is selected from					1 .	1.	
the group consisting essentially	١٠,	i .	ì		· ·	i i	
of the abdominal cavity,	1			1	1	1	٠.
thofseic cavity, knee, shoulder,	1	ł	1426	100	1383	1:26-50	
hip hand, foot, elbow, mouth,	[··		1	(l
spine ear, nose, throat,		· .				1.	·
epidermis and demais of the	٠.	-			l		
natient's hody	<u> </u>		·			-	
58. The electrosurgical system		1 1		•			
of claim 45 wherein			<u></u>		ļ		
the frequency of the voltage		l		l '		1	
applied between the return						1	
electrode and the electrode	3:46-51	3:30-38-	- 1425		1383	1	7:62-8:14
terminal is in the range of about				· ·	l .	i .	
20 kHz and 20 Mbz	٠.		<u> </u>		ļ <u>.</u>		
59. The electrosurgical system					١.		i '
of claim 45 wherein	·			<u> </u>		L	
the voltage applied between the					T		
electrode terminal and the return		١. ا		1	ì	Ι΄	
electrode is in the range from 10	:3:46-51	3:30-38	1425		1383 .	l '- '	
volts (RMS) to 1000 volts						1 - '	l.
(BW2)		. •		٠.			

Page 4 of 11

Examples of where each limitation of the dependent claims of the '536 patent may be found in each reference.

claim text\reference	29	30	- 31	32	33	34 -	35
46, An electrosurgical system as	l .	ľ			1	1 1	
in claim 45, wherein		٠.					
the return electrode forms a		ŀ	-	Ī			
portion of the shaft of the	69 🕆		4:55-5:16			1 !	
electrosurgical probe.				-	L		
47. An electrosurgical system as							
in claim 46 further including						· .	
1		·		-			
an insulating member							
circumscribing the return	· . 69	•	4:55-5:16	İ	l		-
efectrode.							
the return electrode being			,				
sufficiently spaced from the						ľ	
electrode terminal to minimize		Fig. 5	Fig. 4		Fig. 2	. 44 .	
direct contact between the return				ľ	''b '	1 ".	1
electrode and the patient's .] . '		l	1.	
tissue.							
55. The electrosurgical system			١٠.		•		
of clipim 45 wherein					* 11. *1		
the electrode terminal comprises					l		
a single active electrode	68 .	5:11-27	5:17-31	i .			
disposed near the distal end of					i		
the thaft				- ·			-
56. The electrosurgical system	.	•	1			· '	•
of claim 45 wherein . the larget site is selected from			 .	-			
the Broup consisting essentially	,						1
of the abdominal cavity,			٠.			l . '	-
thoracic cayity, knee, shoulder,	:						
hip, hand, foot, elbow, mouth,	68		9:37-47	•-	' '	42	
spine ear, nose, throat				-			٠.
epidermis and dennis of the			1 1		l	F. 1	
patient's body	.	. •	1		:	[
58. The electrosurgical system						1	
of claim 45 wherein	.]			•	l	•	
the frequency of the voltage	1				l		
applied between the return	. ' 1				·	·	
electrode and the electrode	68	•			2:45-3:16	42	
terminal is in the range of about			٠				
20 kHz and 20 Mhz.	· 4	•		٠,		l ·	٠
59. The electrosurgical system							
of claim 45 wherein			<u> </u>				
the voltage applied between the							
electrode terminal and the return	. 1	.	· ' 1			-	
electrode is in the range from 10	68			8	2:45-3:16	1	
volts (RMS) to 1000 volts .		.				i . I	٠.
(RMS).			<u>:</u>			i	

Page 5 of 11

Exhibit B:

Examples of where each limitation of the dependent claims of the '536 patent may be found in each reference.

claim text \ reference	36	37	38	39	40	. 41	41
46. An electrosurgical system as			i	-			
in claim 45; wherein		1		1		1. 1	٠.
the return electrode forms a							
portion of the shaft of the	1		L	Fig. 5, 8.9	4:16-28	292	275
	ı	l		34			-1.5
electrosurgical probe:							
47. An electrosurgical system as	ĺ		·	1		l 1	
in claim 46 further including							
an insulating member	4:4-39		ŀ	Fig. 5; 8:9-	4:36-43	292	275
circumscribing the return	4:4-39			. 34	430-43	232	215
electrode.				· · ·			
the return electrode being .				1			
sufficiently spaced from the	l i	۱.		}		1. 1	
electrode terminal to minimize	٠.	• .	1]) i	
direct contact between the return	1	1 .	J)	}	1 ' '	
electrode and the patient's	l• .	1.	1				
tissue.		<u> </u>	<u> </u>		<u> </u>	 	
55. The electrosurgical system.	1	l '	V		-	-	
of cision 45 wherein			L				
the efectrode terminal comprises		İ	1	l i		1 - 1	
a single active electrode	4:40-58	662	1168	Fig. 5; 8:9-	4:16-35	292	275
disposed near the distal end of	41,14.54			34			
the straft.				<u> </u>			
S6. The electrosurgical system			1		· ·		
of risks 45 wherein					<u> </u>	<u> </u>	
the Efrget site is selected from				l ' .		1. 1	
the group consisting essentially					- *	• •	
of the abdominal cavity.		-			-	1	
thar seic cavity, knee, shoulder,	2:16-34	-	- 1168	3:63-4:16	5:62-6:19	291	275
hip, hand, foot, elbow, mouth,							
spine ear, nose, throat,				1 : 1	i		
epidermis and dermis of the			Ι.	1 1	ł	ì · I	
natibid's body		<u>-</u>			<u> </u>		-
58. The electrosurgical system					i		
of claim 45 wherein					L		
the frequency of the voltage			1	1	ì	1. 1	
applied between the return -						1	
electrode and the electrode			1168]	2:62-65		•
terminal is in the range of about					٠.		
20 kHz and 20 Mhz					L		
59. The electrosurgical system				1	(1	
of claim 45 wherein	• • •				L .		
the voltage applied between the	1						
electrode terminal and the return	•		٠.	. '			
electrode is in the range from 10			_	1	i	1	
yolts (RMS) to 1000 valts					l		
(RMS).	- 1		ĺ	l*	1	1	

Exhibit B:

Examples of where each limitation of the dependent claims of the '536 patent may be found in each reference.

claim text) reference	43	44	45	46	47 :	48	49
46. An electrosurgical system as				١.	ł		
in claim 45, wherein					·		
the return electrode forms a							
portion of the shaft of the	-		1	3:41-4:2	1:57-2:35	4:18-28	
electrosurgical probe.							
47. An electrosurgical system as			1				
in claim 46 further including			1	l			
III Elabii 40 Iaraici mending			1 .	:	-		
an insulating member			†				
circumscribing the return				3:41-4:2	1:57-2:35	4:18-28	
electrode.			l • .	1 :			
the return electrode being							
sufficiently spaced from the] -	I .				
electrode terminal to minimize			1.	١	i		
electrode terminal to minimize direct contact between the return	. 1] -	inherent	6:42	l	. 6:28	
		1		١ ;			
electrode and the patient's							
issue. SS. The electrosurgical system				_			
				1			
of chain 45 wherein						:	
the electrode terminal comprises			٠.			٠	
a single active electrode	2:8-18	5:48-51	5:7-19	3:41-4:2	1:57-2:35	3:65-4:17	3:27-44
disposed near the distal end of						. '	
the shaft.							
S6. The electrosurgical system	:			١.			
of claim 45 wherein - the farget site is selected from		·			-		
the target site is selected from					. !		
the group consisting essentially				i '			
of the abdominal cavity,			. '			1	
thoragic cavity, knee, shoulder,	.1:1-4	-3:6-25		3:8-34	1:18-39	1	1:47-68
hip, hand, foot, elbow, mouth,			٠.		ľ:		
spine, ear, nose, throat,	,				· ·		
epidennis and dermis of the		ľ		· .			-
natient's body				-			
58. The electrosurgical system		• .	· · .				
of claim 45 wherein			<u> </u>				
the frequency of the voltage					l		
applied between the return	. '				١.		
electrode and the electrode		3:36-41		6:5-30			
terminal is in the range of about				. •	1 .		· .
20 kHz and 20 Mhz.	1		:		L		
59. The electrosurgical system							
of claim 45 wherein				•	Ŀ		
the voltage applied between the	7						
electrode terminal and the return	· . I						
electrode is in the range from 10	. !						
volts (RMS) to 1000 volts	. 1						

Examples of where each limitation of the dependent claims of the 536 patent may be found in each reference.

claim text \ reference	50 ·	51	52	53	- 54	- 55	. 56
46. An electrosurgical system as			· ·	-			
	l	} -	i ·		}		
in claim 45, wherein		1:					
the return electrode forms a	3:17-23	3:35-57	2:63-3:5	3:37-64		2:62-68	1:61-2:11
portion of the shaft of the	3:11-23	3:33-31	2,03-3-3	3.37-04		2.02-08	1:01-2:11
electrosurgical probe.		<u> </u>		<u> </u>			
47. An electrosurgical system as			ł	1.	1		
in claim 46 further including	l		ł	1	1		
		<u> </u>		l			
an insulating member	٠.		1 -				
circumscribing the return	3:17-23	3:35-57	1:42-50	3:37-64	1	,2:62-68	
electrode,		<u> </u>					
the return electrode being							
sufficiently spaced from the	l '	· -	٠.				1
electrode terminal to minimize	l	3:53	Ι.	1	′	l . • •	l•.
direct contact between the seture	١.	333	l	۳.	ľ	1	
electrode and the patient's		1 '		,	l	i	
tissue.				L _			
55. The electrosurgical system-						•	
of claim 45 wherein					12.00	· · · · ·	
the electrode terminal comprises		·		l			
a single active electrode			1				
disposed near the distal end of	1:40-51	3:35-57	1:42-50	3:37-64	670	•	1:61-2:11
the Mail.							
S6. The electrosurgical system			_	·		•	
of claim 45 wherein							
the target site is selected from						· ·	
the group consisting essentially							
of the abdominal cavity,			i: '		' '		
thoracic cavity, knee, shoulder,			F 2				
hip, hand, foot, elbow, mouth,	2:2-20	1:9-12	1:5-9	1:9-15	669	1:52-55	1:50-58
spine ear, nose, throat,	1.				l		
spiner ear, nose, urose, cuidermis and demnis of the		1	'	1			
							١٠.
nation's body							
	· · .		: 1	l _			٠,
of claim 45 wherein							
the frequency of the voltage		•				١.	
applied between the return	. 1				669	'	
electrode and the electrode					065		
terminal is in the range of about						. :	٠.
20 kHz and 20 Mhz		- : :					
59. The electrosurgical system					Ì		
of claim 45 wherein							
the voltage applied between the						, .	
electrode terminal and the return	í			-		l i	
electrode is in the range from 10		- 1	ا ، ،		672		
volts (RMS) to 1900 volts	- 1	1			ľ		
(RMS).	- 1					1 .	
KM3F							

Exhibit B: Examples of where each limitation of the dependent claims of the '536 patent may be found in each reference.

claim text \ reference	57	58	59	60	- 61	62 .	63
46. An electrosurgical system as							
in claim 45, wherein							
the return electrode forms a		1					-
portion of the shall of the		4:27-33	l .	3:52-66		3:12-27	
electrosurgical probe.	1.				1		l *
47. An electrosurgical system as							
in claim 46 further including				i		٠ .	1
in claim 40 laterer melocing				•	1	١-	
an insulating member							
circumscribing the return	ŀ			3:52-66		3:12-27	1
electrode.	ĺ	1 .	()- -
the return electrode being	-						
sufficiently spaced from the		l			· ·		ļ.
electrode terminal to minimize	11.				•		ł
direct contact between the return		l '	`	l	l	. Fig. 3 .	
electrode and the patient's	1		l	ĺ			
		٠.	ŀ			l	l
55. The electrosurgical system			-				
of claim 45 wherein							
the electrode terminal comprises							
a sipele active electrode					·	1	
disposed near the distal end of	1.1	-	١.	4:15-29	5:10-28-	3,28-60	
the shaft.	"				٠.		1.
56. The electrosurgical system	,		·				
of claim 45 wherein	4		L		L		
the larget site is selected from							
the group consisting essentially						l `	
of the abdominal cavity,					1		
thoracic cavity, knez, shoulder,	4:20-5:5	3:30-49	1:5-12			3:21-32	15:62-16:7
hip, hand, foot, elbow, mouth,	420-55	1220-03			1	3.21-52	13.02-10.7
spine ear, nose, throat,					,		
epidermis and dermis of the				· ·			
nation's hody		<u> </u>					
58. The electrosurgical system		- في					
of claim 45 wherein			* ;	<u> </u>			
the frequency of the voltage	i -		, "				
applied between the teturn	• •	• •	1				
electrode and the electrode	'	•		· ·	4:28-48		,
terminal is in the range of about							•
20 kHz and 20 Mhz			<u>. </u>		·	·	
59. The electrosurgical system							
of claim 45 wherein							
the voltage applied between the			٠.				
electrode terminal and the return			i	. *			1
electrode is in the range from 10		٠			4:28-48	1 %	3:21-32
volts (RMS) to 1000 volts						3.	1.
(RMS).			·				

Exhibit B:

Examples of where each limitation of the dependent claims of the '536 patent may be found in each reference.

claim test \ reference	64	65	66	67	68	69	70
46. An electrosurgical system as		-					
in claim 45, wherein	[1	i .		
the return electrode forms a							
portion of the shaft of the		l.		4:37-52	4:33-43	1 . !	2:37-46
electrosurgical probe.			1			1 .	
47. An electrosurgical system as			·				
in claim 46 further including		1	-	l .	J .		
to cista 40 intain inclound	ļ.			1.			
an insulating member		-		<u> </u>			
circumscribing the return		1	l .	4:37-52	4:33-43		2:58-66
electrode.		1					2
the return electrode being							
sufficiently spaced from the	l			l			
electrode terminal to minimize	ļ	ı			.		l '
direct contact between the return		1	ĺ.	ĺ		i	i
	'		۲.	l	1 .	2.5	ĺ.
electrods and the potient's		1 .	١.	ĺ	1		1
55. The clostrosurgical system							
of citim 45 wherein							4
the electrode terminal comprises			· · ·			· .	
CHESACCHOOL SCHOOLS COMPLECT				·		1	
a single active electrode dispused near the distal end of	5:44-63	5:20-36	1:63-2:17	4:37-52	4:33-43	3:13-16	2:37-46
the shaft.				r -			
56. The electrosurgical system				·	-	-	·
of claim 45 wherein					1		
the target site is selected from							
the froup consisting essentially							
of the abdominal cavity.	·:	}	. `	· ·	1		1
thoracic cavity, knee, shoulder,		٠.	٠.	1:10-15			i
hip, hand, foot, elbow, mouth,				1:10-15			l
spirit ear, nose, throat,			١	'		ĺ	
epidermis and demais of the		1	. '	· '	1	١,	(
natichi's body			<u> </u>			<u> </u>	
58. The electrosurgical system		•				1	
of claim 45 wherein				L		L	L
the frequency of the voltage		•			1		
applied between the return						l.	
electrode and the electrode		6:25-40				i	1
nerminal is in the range of about						l l	l
					I	i,	l
	. :						
20 kHz and 20 Mhz.							
	·	-					
20 kHz and 20 Mhz. 59. The electrosurgical system of claim 45 wherein		-					· ·
20 kHz and 20 Mhz. 59. The electrosurgical system of claim 45 wherein the voltage applied between the		-		-			· ·
20 kHz and 20 Mhz. 59. The electrosucgical system of claim 45 wherein the voltage applied between the electrode terminal and the return		-		-			
20 kHz and 20 Mbz. 59. The electrosurgical system of claim 45 wherein the voltage applied between the electrode terminal and the return electrode is in the range from 10		-					
20 kHz and 20 Mbz. 59. The electrosucgical system of claim 45 wherein the voltage applied between the electrode terminal and the return		-					

Exhibit B:

Examples of where each limitation of the dependent claims of the '536 patent may be found in each reference.

claim text \ reference	71	72	73
46. An electrosurgical system as		1	
in claim 45, wherein			
the return electrode forms a			
portion of the shaft of the	i	٠.	5:36-58
electrosurgical probe.	1		
47. An electrosurgical system as			
in claim 46 further including	i		i.
un ciann 46 farasci including			
lan insulating member			
circumscribing the return :	5:36-58	1	l
electrode.	ŀ	l	L
the return electrode being			
sufficiently spaced from the		1	1
electrode terminal to minimize	· .		
direct contact between the return		2:29-36	l
electrode and the patient's		٠.	1
			l
tissue			
			•
of claim 45 wherein the electrode terminal comprises			
a single active electrode	. 1		
a single active electrode	3:43-53	2:36-41	6:8-22
disposed near the distal end of			
the shaft. 56. The electrosurgical system		├	
			٠.
of claim 45 wherein the carget site is selected from			
the carget site is selected from		'	
the group consisting essentially		l' . ;	
of the abdominal cavity,	•		
thorseic cavity, knee, shoulder,	l. *•	2:63-68	3:26-34
hip, hand, foot, elbow, mouth,		;	
spine car, nose, throat,			
epidermis and dermis of the			
nation's body			<u> </u>
58. The electrosurgical system			
of claim 45 wherein			
the frequency of the voltage			
applied between the return			
electrode and the electrode			
rerminal is in the range of about			
20 kHz and 20 Mhz.			<u>. </u>
59. The electrosurgical system	. 7		
of claim 45 wherein			
the voltage applied between the			٠.
electrode terminal and the return			
electrode is in the range from 10			6:23:33
volts (RMS) to 1000 volts			
(RMS).			
IKRANST			

Exhibit E: Anticipation and obviousness contentions

Smith & Nephew contends that the following claims are anticipated by at least each of the following primary references. Smith & Nephew reserves the right to supplement this contention in the event ArthroCare changes its construction of the asserted claims, or in the event the Court's construction of the asserted claims, or in the event the Court's construction of the asserted claims, or in the event the Court's construction of the asserted claims differs.

Patent	Claim	References
536	46	8, 15, 23, 29, 31, 48, 51, 52
-	47	23, 31, 48, 51
	55	8, 15, 22, 23, 26, 29, 31, 36, 38, 48, 51, 52, 65
	56	8, 15, 26, 29, 31, 36, 38, 51, 52
	58.	22, 23, 26, 29, 38, 65
	59	22, 23, 26, 29
882	1 '	8, 15, 26, 38, 48, 51, 52, 65
	13	15, 26, 52, 65
	17	26
	18	26
	21 .	26, 52
	23 ·	8, 26, 38, 48, 51, 52, 65
	24	8, 26, 38, 48, 51, 52, 65
	29	15, 26, 65
	47	26, 29, 38
	48	26, 29
	49	26, 29
	50-	26, 29, 65
	54	48
592	3	8, 15, 23, 26, 31, 48, 51
• •	4	8, 15, 23, 26, 31, 48, 51
	9	8, 15, 23, 26, 31, 48, 51
	11	8, 23, 26, 31, 48, 51
	13 .	8, 15, 23, 26, 31, 48, 51
	18	8, 15, 26, 48, 51
	21 .	23, 26
	26	8, 15, 31, 48, 51
	27 ·	8, 15, 31, 48, 51
	30	8, 15, 31, 48, 51
	32	8, 31, 48, 51
	34	8, 15, 31, 34, 48, 51
	39	8, 15, 48, 51

Smith & Nephew also contends that the following claims would have been obvious to one of ordinary skill in the art at the time of the invention in view of at least each of the following combinations of primary references, which Smith & Nephew contends would have been combined for at least the following reasons. Smith & Nephew reserves the right to supplement this contention in the event ArthroCare changes its construction of the asserted claims, or in the event the Court's construction of the asserted claims, or in the event the Court's construction of the asserted claims differs.

		<u> </u>	<u> </u>
Patent	Claim	Combinations"	Motivation to Combine
536	46	10 with any one or more of 22,	Each reference is directed to the
		26, 36, 38, 65;	same problem - applying
	· ·	any one or more of the preceding	electrical energy to a target site on
		with any one or more of the	a patient's body structure.
•		anticipating references listed	
		above.	
	47 .	Any one or more of 8, 15, 26,	Each reference is directed to the
		29, 36, 52 with any one or more	same problem applying
	•.	of 10, 34;	electrical energy to a target site on
		any one or more of the preceding	a patient's body structure.
٠. ا		with any one or more of the anticipating references listed	
	-	above.	
$\overline{}$	55	10 with any one or more of the	Each reference is directed to the
1		anticipating references listed	same problem - applying
	. **	above.	electrical energy to a target site on
	•		a patient's body structure.
	56	34 with any one or more of 48,	Each reference is directed to the
. }	•	65;	same problem - applying
٠ ا	·	any one or more of the preceding	electrical energy to a target site on
J	- 1.	with any one or more of the	a patient's body structure.
- 1		anticipating references listed .	
		above.	
- 1	58	Any one or more of 8, 15, 31,	. Each reference is directed to the
	-	48, 51, 52 with any one or more	same problem — applying
1	- 1	of the anticipating references	electrical energy to a target site on
		listed above.	a patient's body structure.

	Patent	Claim	Combinations	Motivation to Combine
		59	32 with any one or more of 8,	Each reference is directed to the
-			15, 31, 38, 48, 51, 52, 65;	same problem — applying
		l	any one or more of the preceding	electrical energy to a target site on
			with any one or more of the	a patient's body structure.
		ì	anticipating references listed	
			above.	
	882	1	10 with any one or more of 22,	Each reference is directed to the
	100		23, 29, 31, 34, 36;	same problem - applying
			any one or more of the preceding	electrical energy to a target site on
			with any one or more of the	a patient's body structure.
	. 1	-	anticipating references listed	
			above.	Each reference is directed to the
		13	Any one or more of 10, 29 with	same problem - applying
	•	. *	any one or more of 8, 38, 48, 51;	electrical energy to a target site on
			any one or more of the preceding with any one or more of the	a patient's body structure.
i			anticipating references listed.	a padent's body subcidite.
-0			above.	
មល្អក្រភក១.		17	Any one or more of 23, 29, 32	Each reference is directed to the
		**	with any one or more of 8, 15,	same problem - applying
15			38, 48, 51, 52, 65;	electrical energy to a target site on
ā			any one or more of the preceding	a patient's body structure.
0			with any one or more of the	
64	- 1		anticipating references listed .	
n .			above.	
70		18	Any one or more of 23, 29, 32	Each reference is directed to the
54			with any one or more of 8, 15,	same problem applying
			38, 48, 51, 52, 65;	electrical energy to a target site on
900			any one or more of the preceding	a patient's body structure.
Ø.	.		with any one or more of the -	•
- 1			anticipating references listed .	
ļ		<u></u>	above.	First - Common in disease d.c. d.
		21 -	Any one or more of 31, 36 with any one or more of 8, 15, 38, 48,	Each reference is directed to the same problem - applying
- 1				'electrical energy to a larget site on
- {	- 1		51, 65; any one or more of the preceding	a patient's body structure.
		. 1	with any one or more of the	a paucin s body saucine.
- 1	: 1	- 1	anticipating references listed	·
- 1	٠	j	above.	
ŀ		23	Any one or more of 22, 23, 29,	Each reference is directed to the
ı	. 1	~	31, 36 with 15:	same problem applying
. I	- 1	٠	any one or more of the preceding	electrical energy to a target site on
	.	· [with any one or more of the	a patient's body structure.
		;	anticipating references listed	a paneta a see y sasonate.
- 1			above.	
ι			40011	

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Frederick P. Fish 1855-1930 W.K. Richstesson 1859-1951

BY FAX AND MAIL

October 9, 2002

Peny Clark, Esquire Weil, Gotshal & Manges LLP 201 Redwood Shores Parkway Redwood Shores, CA 94065

Re: Arthrocare Suit - Delaware
USDC-D. DeL - C.A. No. 01-504-SLR

Dear Perry:

I have enclosed a supplemental set of invalidity claim charts.

Very truly yours,

Kurtis MacFerrin

cc: Jack B. Blumenfeld, Esq., Monis, Nichols, Arsht & Tunnell (fax only)

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TEL TONE

310

Exhibit A:

Prior art references upon which Smith & Nephew presently intends to primarily tely.

	# -	· Issue/ Pub¹n Date	Patent Numberl Publication	Inventor/Author	Title.
	8	00/00/76	Acta Medicotechnica (Medizinal- Markt); Vol. 24, No. 4, 1976 129 – 134	E. Elsasser and E. Roos	Uber ein Instrument zur leikstfornfreien transurethralen Resection (Concerning An Instrument for Transurethral resection without leakage of current)
	10	07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
5	15	09/26/78	US 4,116,198 and its file history	Eberhard Roos	Electro-Surgical Device
116	22	04/27/82	US 4,326,529	James D. Doss and Richard L. Hutson	Corneal-Shaping Electrode
20501000	23	04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal-Shaping Electrode with Flexible Removable Skirt
T - JEE LOOK	26	06/00/85	JACC Vol. 5, No. 6, 1382-6	Comelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Born, Ph.D, Patrick W. Sernuys, MD, Geert T. Meester, MD, FACC.	Vaporization of Atherosclerotic Plaques by Spark Erosion
	29	00/00/87	Kardiologie, Kardiol.76: Supp. 6, 67-71 (1987)	C.J. Slager, A.C. Phaff, C.F. Essed, J.C.H. Schnurbiers, N. Born, V.A. Vandenbroucke, and P.W. Serruys	Spark Erosion of Arteriosclerotic Plaques
	31	06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe-
-	32	07/00/88	Valleylab Part Number 945 100 102 A	Valleylab, Inc.	Surgistat Service Manual

ŧ	Issue/ Pub'n Date	Patent Number/ Publication	Inventor/Author	Tide
3	00/00/89	SPIE Vol. 1068 Catheter-based Sensing and Imaging Technology	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback
. 30	02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
			Benjamin I. Lec, MD, FACC, Gary J.	
0000000	04/00/89	JACC Vol. 13 No. 5, 1167-75	Becker, MD, Bruce F, Waller, MD, FACC, Kevin J. Barry, MS, Raymond J. Connolly, Ph.D, Jonathan Kaplan, MD, Alan R. Shapiro, MS, Paul C. Nardella, BS	Thermal Compression and Molding of Atherosclerotic Vascular Tissue With Use of Radioficquency Energy: Implications for Radioficquency Balloon Angioplasty
48	12/11/90	US 4,976,711	David J. Parins, Mark A. Rydell, Peter Stasz	Ablation Catheter With Selectively Deployable Electrodes
51 1	04/16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument Having Needle Cutting Electrode And Spot-Coag Electrode
52	04/23/91	US 5,009,656	Hary G. Reimels	Bipolar Electrosurgical Instrument
74	1990		Jerry L. Malis, Valley Forge Scientific Corp	CMC-III Bipolar System

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Examples of where each limitation of the claims of the '536 patent may be found in each reference.

claim text \ reference	1	2	3	i 4	5	! 6	_ 7
45. An electrosurgical system for applying electrical energy to a target site on a structure within or on a patient's body, the							
system comprising:	1:15-27	207	3:48-4:14	1:5-2:2	58-60	1-3-7	7:44-66
a high frequency power supply;	1:15-27	201	3,40-4.14	1.3.2.2	. 38-60	33-7	2.44-00
on electrosurgical probe comprising a shaft having a proximal end and a distal end	1:40-55, Fig. 1		8:10-9:8	i:5-2:2	58-60	3:3-7, Fig. 1, 2	4:4-19, 2:44-66
an electrode terminal disposed near the distal end, and	1:40-55, Fig. 1		8:10-9:8	. 1:5-2:21	58-60	3:3-7, Fig. 1, 2	4:4-19, 2:44-66
a connector near the proximal end of the shaft electrically coupling the electrode terminal to the electrosurgical power supply;	1:40-55, Fig. 1		8:10-9:8	1:5-2:2	58-60	3:3-7, Fig. 1, 2	4:4-19, 2:44-66
a rourn electrode electrically coupled to the electrosurgical nower supply; and	1:15-27	207	3:48-4:14	ļ ; 5-2:2	58-60	3.3.7	2:44-66
an electrically conducting fluid supply for directing electrically conducting fluid to the target site such that			· 9:9-25				
the electrically conducting fluid generates a current flow path befüren the return electrode and the electrode terminal.			9:9-25				
46. An electrosurgical system as in chim 45, wherein							
the itum electrode forms a portion of the shaft of the electrosurgical probe.	4:9-24			: :	•		Fig. 2
47. An electrosurgical system as in claim 46 further including			3 2		,		l
an insulating member chromocribing the return electrode,		• •					3:58-61
the return electrode being sufficiently spaced from the electrode terminal to minimize	•	.]		• ••			
ciectrode terminal to miniorze direct contact between the return electrode and the patient's trissue.	*:	•	:		-		
55. The electrosurgical system of claim 45 wherein						-	

Page 1 of 22

Exhibit B:
Examples of where each limitation of the claims of the '536 patent may be found in each reference.

claim text \ reference	1 .	, 2	- 3	1 4	- 5	6	7
the electrode terminal comprises		i	1				
a single active electrode disposed near the distal end of the shaft.	1:40-55	206	8:10:9:8	3:10-28	.58	2:54-57	2:67-3:16
56. The electrosurgical system of claim 45 wherein			-	,	,		
the target site is selected from				٠.			
the group consisting essentially of the abdominal cavity.	-	•			^		
thoracic cavity, knee, shoulder, hip, hand, foot, elbow, mouth,				Ì		1:45-50	
spine, ear, nose, throat,		•	- 1				
epidermis and dermis of the	•						•
58. The electrosurgical system of claim 45 wherein							
the frequency of the voltage					• .		
cleffrode and the electrode .	• .	206-07	3:49-4:14		58		
terminal is in the range of about							
59: The electrosurgical system of claim 45 wherein		: '			- 1	٠ .	
the voltage applied between the electrode terminal and the return			•	·	٠		
electrode is in the range from 10		211			.58		
volts (RMS) to 1000 volts (RMS).					<u> </u>	·	

Page 2 of 2

Exhibit B: Examples of where each limitation of the claims of the '536 patent may be found in each reference.

					12	13	
claim text \ reference		9.	10	11	12	13	14
45. An electrosurgical system			•	1	1 .		-
for applying electrical energy to							1
a target site on a structure within				'			
or on a patient's body, the						l	1
system comprising:							
a high frequency power supply;	i	2:33-52	4:18-28	. 2	- 528	4:15; 7.38- 50	
an electrosurgical probe		2:40-63	4:18-28	2	530	6:55-70	
comprising a shaft having a	3,7	2:40-63	4:18-28	1 4	330	a	
proximal end and a distal end						-	
an electrode terminal disposed	3,7	2:40-63	·· 4:18-28	2	. 530	6:55-70	١. ٠
near the distal end, and	3,1	2:40-03	4:10-20	1 1	, ,,,,		٠.
a connector near the proximal					-		<u>-</u>
and of the shaft electrically		•					
coupling the electrode tenninal	. 3,7	2:40-63	4:18-28	· · · z	. 530	6:55-70	ŀ.
to the ejectrosmities bower	-,,			l '			
supply,							
a return electrode electrically						4:15:7:38-	
coupled to the electrosurgical		2:33-52	4:18-28	1 2	- 528	4:15; 7:38- 50 ·	• .
nower supply: and				1 1		- 30 .	1.4
an electrically conducting fluid	٠				1		
supply for directing electrically	4-5	2:40-63		, '	. 529 -		ļ
conducting fluid to the target	4-3	2:40-03			22		
site such that			***		<u> </u>		
the electrically conducting fluid				. •	l -	ŀ	ŀ
generates a current flow path		-				٠. ا	١.
between the seturn electrode and	4-5 -	2:40-63	-		529	1 .	l
the electrode terminal.				١.			Į.
_ n						<u> </u>	
46 An electrosurgical system as		- 1		·	 -	1	Ι'
în chim 45, wherein			<u> </u>	<u> </u>	<u> </u>		
the leturn electrode forms a			4:31-43	2 .			l
portion of the shall of the			4:31-43	* -	1.		1
electrosurgical probe.						_	
47. An electrosurgical system as		1	- '	١.	l	l '	٠.
in claim 46 further including					:	1	١.
an insulating member		<u> </u>		-			
		٠. ا	5:50-57	3	l		ı
circumscribing the return			3.30-37		I	2	1
the return electrode being						ļ	
sufficiently spaced from the					[
electrode tennimal to minimize			* .		·	l' · ·	
direct contact between the return	1.		: .	- 10			[
electrode and the patient's					l		1
	. '		٠.				l. •
tissue. 55. The electrosurgical system							·
of claim 45 wherein		i	•				1
Of claum 43 wildress 1				فيستنا	t	L-i	

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Exhibit B:
Examples of where each limitation of the claims of the '536 patent may be found in each reference.

claim text \ reference	8	. 9	10	. 11	12	13	14
the electrode terminal comprises a single active electrode disposed near the distal end of the shaft.	7	7:58-68	4:44-64	. 3 .	530	6:45-54	
So. The electrosurgical system of claim 45 wherein the target site is selected from the group consisting examinally of the abdominal cavity, thoracic cavity, knoe, shoulder, hip, hand, foot, elbow, mouth, spine, ear, nose, throat, epidermis and dermis of the hastient's hody. 58. The electrosurgical system	ħ	0.0479167		2	527		
of claim 45 wherein the frequency of the voltage applied between the rearm clell-bride and the electrode teriginal is in the range of about 20 FHz and 20 Mir. 59, The electrosurgical system		1:34-53					
of iclaim 45 wherein the yolinge applied between the sleggrode terminal and the return electrode is in the range front 10 volts (RMS).		1:34-53			_		7:26-42

avs.

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Examples of where each limitation of the claims of the \$36 patent may be found in each reference.

claim text \ reference	15	16	17	: 18	1. 19	• 20	21
45. An electrosurgical system		i			1		
for applying electrical energy to					l :		
lor applying electrical energy to		· ·		• • •	l :		
a target site on a structure within	1	1	Ι.			Ι.	1
or on a patient's body, the	1	l		1.,	Ι΄.	l	!!
system comprising:							
a high frequency power supply;	1:5-17	845-46	6;1-30	1:12-37	2:33-46	2:35-58	333
an electrosurgical probe							
comprising a shaft having a	4:51-5:20	846	6:1-30	1:12-37	2:33-46	2:35-58	333
proximal end and a distal end,			Ι.			•	i
					•	٠.	
an electrode terminal disposed	4:51-5:20	-846	6:1-30	1:12-37	2:33-46	2:35-58	-333
near the distal end, and	í						
a connector near the proximal	-						
end of the shaft electrically							1 1
coupling the electrode terminal	4:51-5:20	846	6:1-30	1:12-37	2:33-46	2:35-58	333
to the electrosurgical power						-	i
supply:				٠.	Ι. Ι		
a return electrode electrically			· ·				
coupled to the electrosurgical	1:5-17	845-46"	6:1-30	1:12-37	· 2:33-46	2:35-58	333
power supply; and							
an electrically conducting fluid							
supply for directing electrically	1:52-56,						1 1
conducting fluid to the target	5:26-30,	846	١ ٠	3:67-4:3	1:34-38	2:35-58	334
site such that	7:59-62	•	ļ '			2	` `
			-	7.7			
the electrically conducting fluid	1:52-56,		1	· .			1
generates a current flow path	52620	. 846	, ,	3:67-4:3	1:34-38	2:35-58	334
between the return electrode and	7:59-62			5101, 125			
the electrode terminal.							1
46 An electrosargical system as							
in chin 45, wherein							·
the return electrode forms a					·.		
portion of the shaft of the	5:3-10		-		2:34-46	2:35-58	1.
electrosurgical probe.	J		•		,		.
47. An electrosurgical system as							
in claim 46 further including		1			1 : 1	• •	1
m caun to turder menomig					1		
an insulating member · .					·	7	
circumscribing the return		_ 1			2:34-46	2:35-58	1
chemiscroms me terms				٠.	1		1
the return electrode being		-					
sufficiently spaced from the]				1 1		·
electrode terminal to minimize	- 1	· .	'				. [
direct contact between the return	3:5-20						1
					> 1		-(
electrode and the patient's	.		•		·		
tissue			·				
55. The electrosurgical system	ì					!	- 1
of claim 45 wherein			•		'۔۔۔۔'		الـــــــا

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Examples of where each limitation of the claims of the '536 patent may be found in each reference.

claim text \ reference	15	16	17 -	18	-19	20	21
the electrode terminal comprises a single active electrode disposed near the distal end of the shaft.	4:66-5:2	845	3:1-52	1:15-36	2:34-46	2:35-58	333
56. The electrosurgical system of claim 45 wherein					<u>.</u>	<u> </u>	
the target site is selected from the group consisting essentially of the abdominal cavity, thoracic cavity, knee, shoulder, hip, hand, foot, elbow, mouth, spine, car, nose, throat, epidermis and dermis of the	1:18-27/,	845		2:21-63			334
nationt's bady 58. The electrosurgical system of class 45 wherein					••		٠.
the frequency of the voltage applied between the return electrode and the electrode nerminal is in the range of about 20; Flz and 20 Mbz. 59; The electrosurgical system				8:30-39	6:61-58	2:35-58	333
of chaim 45 wherein- the yoltage applied between the electrode terminal and the return electrode is in the range from 10 volta (RMS) to 1000 volts (RMS).				8:30-39	5:46-6:7	2:35-58	333

Exhibit II:

Examples of where each limitation of the claims of the '536 patent may be found in each reference...

			·			<u> </u>	
claim text \ reference	22	23	Z4 .	25	26	27	28
45. An electrosurgical system						1	
for applying electrical energy to			. '			- 1	
a target site on a structure within		ļ. i	i				1
or on a patient's body, the	l *		l l		ĺ .		
system comprising:	!						
	2:21-58	2:42-68	1425	99	1383	2:38-66	2:23-33
a high frequency power supply,	2:21-34	2:42-08	1923	23	1303	238-00	2.23-33
an electrosurgical probe	-						
comprising a shaft having a	2:21-58	2:42-68	1425	99 -	1383	2:35-66	2:23-33
proximal end and a distal end,		1					
an electrode terminal disposed							1
mear the distal end, and	2:21-58	2:42-68	1425 -	99	1383	2:35-66	2:23-33
R .	,						
a connector near the proximal		:			ľ		
end of the shaft electrically :		1		4			
coupling the electrode terminal.	2:21-58	2:42-68	1425	99 _	1383	2:35-66	2:23-33
to the electrosurgical power		· .	. 1				
supply:							
a setum electrode electrically		2:42-68	1425 .	99	1383	2:38-66	2:23-33
coulded to the electrosurgical	- 2:21-58	2:42-08	1425	99.	1383	2:38-00	2:23-33
power supply; and an electrically conducting fluid							l
supply for directing electrically						l; .	2:18, 5:28-
conducting fluid to the target	2:21-58	2:42-68	1425	. 99	1383	3:48-53	31
site such that	3	· ·			Į		1 "
		-			·		-
the electrically conducting fluid	•					1 1.	2
generates a current flow path	2:21-58	2:42-68	1425	99	1383	· 3:48-53	2:18, 5:28-
between the return electrode and	- 1	١.				,	31
the electrode terminal.	. 1		١.				
46 An electrosurgical system as	· · · · ·				:		
in claim 45, wherein						•	
the fetura electrode forms a					l. —		
portion of the shaft of the		Fig. 1				3:30-47	1
electrosurgical probe.		٠					
47. An electrosurgical system as	,					1	
in claim 46 further including .			:	· · ·		1	1
L		<u></u>					
an insulating member			· · ·	l			1
circumscribing the return .		Fig. 1-2			,	3:30-47	1
electrode,							
the return electrode being			١.,	1	J	l	l
sufficiently spaced from the							
electrode terminal to minimize	•	2:42-68	١.		1383.	i	
direct contact between the return							1
electrode and the patient's				l.	l		1
rissuc.						-	_
55. The electrosurgical system	r	1		-		1	
of claim 45 wherein				L	L	<u></u>	

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Exhibit B: Examples of where each limitation of the claims of the '536 patent may be found in each reference.

claim text \ reference	22	23	. 24	25	26	27	. 28
the electrode terminal comprises a single active electrodo disposed near the distal end of the shaft.	2:41-43	Fig. 9; 3:29 30	1425	100	1383	1:26-50	1:57-2:6
56. The electrosurgical system of claim 45 wherein		0			İ		
the target site is selected from the group consisting essentially of the abdominal cavity, thoracic cavity, lonce, shoulder,							
hip, hand, foot, elbow, mouth, spine, ear, nose, throat,			1426	100	1383	1:26-50	
epidermis and dennis of the nation's hody 58. The electrosurgical system				-	;		
of claim 45 wherein the frequency of the voltage applied between the return			·-·	-			
electrode and the electrods teminal is in the range of about 26 KHz and 20 Mhz.	3:46-51	3:30-38	.1425		-1383		7:62-8:14
59, The electrosurgical system of Claim 45 wherein						·	
the voltage applied between the electrode terminal and the return electrode is in the range from 10	3:46-51	3:30-38	1425 ·		1383		
valts (RMS) to 1000 volts (RMS).							

Examples of where each fimitation of the claims of the '536 patent may be found in each reference.

claim text \ reference	29	30-	31	32	1 33	34	35
45. An electrosurgical system	-		١-	l	1		í
for applying electrical energy to	-			· 1		i *	i
a target site on a structure within			1				1
or on a patient's body, the			1 .	1 .		1	1
system comprising:				·			
			2:45-58		2:45-69	• 42	248
a high frequency power supply;	67-68	4:32-5:10	2:43-38	1	2:45-69	42	248
an electrosurgical probe			-:				
comprising a shaft having a	67-68	4:32-5:10	2:45-58		2:45-69	٠.	248
proximal end and a distal end,					بدا	Γ.	
			·				
an electrode terminal disposed	67-68	4:32-5:10	. 2:45-58	i.	2:45-69		248
near the distal end, and		_				L	
a connector near the proximal						•	-
end of the shaft electrically				'			
coupling the electrode terminal	67-68	4:32-5:10	2:45-58		2:45-69	ľ	248
to the electrosurgical power				[[1
รแกกิง: •				Ŀ			
a return electrode electrically			7 T. 4"				
compled to the electrosurgical	67-68	4:32-5:10	2:45-58		2:45-69	42	248
power supply; and	-					·	<u> </u>
an electrically conducting fluid)			· -		1	**
supply for directing electrically	61		3:31, 7:65		1	٠.	. 248
conducting fluid to the target							
site such that				<u> </u>			
therelectrically conducting fluid							
generates a current flow path				1		'	248
beforen the return electrode and	68		3:31, 7:65		·		248 -
the lectrode terminal.							
46 An electrosurgical system as		-					
					1	:	
in Main 45, wherein							
nortion of the shall of the	69		4:55-5:16			:	Į.
electrostreical probe.			455-5.10			l	l
47. An electrosurgical system as				·			· ·
in claim 46 further including	•				-	1	
N CIALLY 40 ILLUIC INCIDING					• •		
an insulating member			-				 -
circumscribing the setum	69		4:55-5:16		١.	i	1
electrode.						ļ .	
the return electrode being							
sufficiently spaced from the	.	· .]					· ·
electrode terminal to minimize	:				- 1		
direct contact between the return	.	Fig.5	Fig. 4		Fig. 2	44	
electrode and the patient's				0			1 .
	. 1		. 1				
155. The electrosurgical system							
of claim 45 wherein	i	.1	€ .				
ol claim 45 wacrem						Ľ	

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Exhibit B:
Examples of where each limitation of the claims of the '536 patent may be found in each reference.

claim text \ reference	29	30	: 31	32	33	1 34	35
			 *				
the electrode terminal comprises	•	1 -		ļ.			
a single setive electrode	68	5:11-27	5:17-31	1-			
disposed near the distal end of		1					
the shaft.							
56. The electrosurgical system		١.		9			
of claim 45 wherein							
the target site is selected from	•			١.		1	
the group consisting essentially	•	1		Ι.	l .		
of the abdominal cavity,		' '			i		
thoracic cavity, knee, shoulder,	ż.	1.	9:37-47	1	!	42 . 1	
hip, hand, foot, elbow, mouth,	68	1 '	3,37-47	ŀ.		· **	
spine, ear, nose, throat,	• •	1 .	-		1 -		
coidermis and dermis of the			٠.			1	
natient's body.		ſ	- "	-	<u>'</u>		
58. The electrosurgical system					1 .	ļ	
of claim 45 wherein				L _			-
the frequency of the voltage	•	-					
applied between the return			-			1	
electrode and the electrode	- 68				2:45-3:16	-42	
terminal is in the range of about	_			٠.			
20 kHz and 20 Mhz.						1	,
59,77 he electrosurgical system	• •						
of claim 45 wherein				•			,
the voltage applied between the	٠.						
electrode terminal and the return				1	1	٠. ا	,
electrode is in the range from 10	68	1 .		. 8	2:45-3:16	l i	
valis (RMS) to 1000 volts		l. '		· ·	ļ. ·		
(RMS)				L .			

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Exhibit B:
Examples of where each limitation of the claims of the '536 patent may be found in each reference.

Flaim text \ reference	36	37	38	; 39	. 40	41	42
45. An electrosurgical system					i		
for applying electrical energy to		ľ	l			l. :	
a target site on a structure within		1	, 1	i . :	i	i	i '
or on a patient's body, the		٠.		!		1 .	
system comprising:				- 1	-	•	-
						:	
a high frequency power supply;	4:4-39	662-63	1168	5:1-47	. 2:62-65	291	275 .
an electrosurgical probe					·		
comprising a shaft having a	4:4-39	662-63	1169	5:1-47	2:19-22	292	275
proximal end and a distal end,			1	l •'			
		·	1.				
an electrode terminal disposed	4:4-39	662-63	1169	5:1-47	2:19-22	292	275
near the distal end, and		j		•			
a connector near the proximal							
end of the shaft electrically	٠.	J	1 -	l 1	•	٠.	"
counting the electrode terminal-	4:4-39	662-63	- 1169	5:1-47	2:19-22	292	275
to the electrosurgical power.	- 1	1 8 3		j i	-	٠. ١	
semetty:			!	ļ :	-		'
a return electrode electrically							
cappled to the electrosurgical .	4:4-39	,662-63	1468	5:1-47	2:62-65	291	275
nower supply: and -			Ĺ			• •	
an electrically conducting fluid				1	-	••	
supply for directing electrically	7:30-32	663	1168	l. I		29T-	275
conducting fluid to the target	4.30-32	, va		l		231	273.
site such that							
the electrically conducting fluid	1					1.	
generales a current flow path							
befrien the return electrode and	7:30-32	663	1168-	, ,		291	275
the electrode terminal.				٠. ا			
	<u> </u>			<u> </u>		<u> </u>	
46. An electrosurgical system as			- '				۱.
in Claim 45, wherein							
the tentra electrode forms a	٠. ا			Fig. 5; 8:9-	4:16-28	292	275
partion of the shaft of the				34 .	4:10-26	292	2/3
electrosurgical probe. 47. An electrosurgical system as					-		-
in claim 46 further including			:				
m cisum 46 further including					٠.	ŀ .	
as insulating member						l	
circumscribing the return	- 4:4-39			Fig. 5; 8:9-	4-36-43	292	275
electrode.	1.4-37	- 1		34,	7.,343	192	213
the return electrode being							
sufficiently spaced from the	· "	٠.				·	
clearede terminal to minimize	٠. ا		1			· ·	
direct contact between the return	1		÷••			ا.	١ '
electrode and the patient's		: 1		'		1	
	. [- 1	-	l· · ˈ	
tissue. 55. The electrosurgical system	·	:				H	<u>-</u>
of claim 45 wherein	٠ ا	• 1	1. 1.1			[• •	l
Not event 43 Austrem		لمحجب		لــــا		ا ــــــــــــــــــــــــــــــــــــ	L

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Exhibit B:

Examples of where each limitation of the claims of the '536 patent may be found in each reference.

40-58	662	1168	Fig. 5; 8:9-	4:16-35	292	275
	662			4:16-35	292	275
	662		. 34	4:16-35	292	275
					-	
		••				1
					1.	i
			1		1	
						1
D-34		1168	3:63-4:16	5:62-6:19	291	275
		-			١.	_
					i	1
				1		
- 1						
·						
- 1			. 1			
		1168		2:62-65		1
- 1	l l	1	1		:•	ľ
						L
- 1	. 1	[
						L.
.	.		.			
- 1						
- 1	- 1	- 1	1			
-1		ľ	. 1		1	
,	- 1					
		• 1	• 1			

Examples of where each limitation of the claims of the '536 patent may be found in each reference.

claim text \ reference	43	44 -	45	1 46	47	48 ;	49 .
			 -==				
45. An electrosurgical system				i	1		i
for applying electrical energy to	-		'		1 -	: 1	- 1
a target site on a structure within		l .	!	ĺ		1 1	
or on a patient's body, the	ļ	l ·		1			
system comprising:		L					
a high frequency power supply;	7:8-4:10	2:26-51	4-71-5:6	2:31-53	1:34	2.78	1:55
	2.6~4.74	22091	121.315				,
an electrosurgical probe		l				1 1	
comprising a shaft having a	2, 10	2:26-51	4:40	2:31-53		2:28	1:55
proximal end and a distal end,		٠.					
an electrode tenninal disposed	2,10	2:26-51	4:40	2:31-53		2:28	1:55
near the distal end, and		1		• •	l	ŀ	
a connector near the proximal						F	
end of the shaft electrically		1	, (4.7	١.	•	1:	
coupling the electrode terminal	· 8, 10 '	2:26-51	4:40	2:31-53		2:28	1:55
to the electrosurgical power	1						
supply:				•			
a return electrode electrically							
compled to the electrosurgical	2:8-4:10	2-26-51	4:21-5:6.	2:31-53	1:34	2:28	1:55
Dowel and are cick as a form							
an:electrically conducting fluid	-	_					
supply for directing electrically					•		
conducting fluid to the target	` 11		3:48-55	: 6:42	· . ·	628, 4:6	1:65
site such that					l	٠٠	
			7 ~	٠		- : -	
threelectrically conducting fluid		١.,		* -	1		
genérates a current flow path	21		3:48-55	6:42		6:28.4:6	1:65
beliveen the return electrode and		1		•	١.	,	1,25
the electrode terminal.	_		-	•	l	l : · · · · ·	
46 An electrosurgical system as							~
in claim 45, wherein							
the Yehrn electrode forms a							
portion of the shaft of the	.			3:41-4:2	1:57-2:35	4:18-28	
				3.41-4.2	ودبيدات	4.14-20	
electrosurgical probe.							
47. An electrosurgical system as		-	1	•	l .	• •	
in claim 46 further including			î l	•	Ι.	1	
						·	
an insulating member			-	3:41-4:2	1:57-2:35	4:38-28	
circumscribing the return		1	· :	3.41-4:2	137-233	4:38-28	
electrode.	-						
the return electrode being	.				l i		
sufficiently spaced from the	. 1				l	1 ' !	
electrode terminal to minimize		1	inherent	6:42	l	6:28	
direct contact between the return	. 1				1.		
electrode and the patient's					1		
rissue,					L	<u> </u>	
55. The electrosurgical system .	. 7						
of claim 45 wherein	:						

Exhibit B:
Examples of where each limitation of the claims of the '536 patent may be found in each reference.

·							
claim text \ reference	43	44	45	46	47	48	49 :
the electrode terminal comprises a single active electrode disposed near the distal end of the shaft.	2:8-18	3:48-5I	5:7-19	3:41-4:2	1:57-2:35	3:65-4:17	3:27-44
56. The electrosurgical system				1			
of claim 45 wherein					<u> </u>		
the target site is selected from		-					
the group consisting essentially				· .	:		
of the abdominal cavity,		•					. 1
boracie cavity, knee, shoulder,	1:1-4	3:6-25		3:8-34	1:18-39	l. 1	1:47-68
hip, hand, foot, elbow, mouth,			; ·	•	F . •	1	
spine, ear, nose, throat,	٠						
epidermis and dermis of the					′	·	
ontient's hody 58. The electrosurgical system							
of claim 45 wherein		- 1	• •		<u>L</u>	,	
the frequency of the voltage							
applied between the return electrode and the electrode		3:36-41		6:5-30			
terminal is in the range of about 20 KHz and 20 Mhz				٠.	1		
59 The electrosurgical system		-					
of Eliim 45 wherein							L
the voltage applied between the					٠.	1	
electrode terminal and the return			ř. / 1		i		
clectrode is in the range from 10	-			١.	1 .	100	
volts (RMS) to 1000 volts				J* *		l .	
(RAS)	Ļ				L		

Examples of where each limitation of the claims of the '536 patent may be found in each reference.

claim text \ reference	50	51	52	53	. 54	55 .	56
45. An electrosurgical system		1.	ļ			1 33	
		Į.	i	i.	i		
for applying electrical energy to			1	ľ	į	ļ. · ·	' 1
a target site on a structure within	4	l	í		i .		١. ا
or on a patient's body, the				ł	' '		
system comprising: .							
a high frequency power supply:	2:21-63	2:41-3:58	3:1-32	2:28-55	670	2:7-46	1:61-2-12
		***************************************			<u> </u>	ļ	
an electrosurgical probe	1.		ŀ ·				1
comprising a shaft having a	·2:21-63	2:41-3:58	3:1-32	2:28-55	669	2:7-46	1:61-2:12
proximal end and a distal end,	_:_:_	•. •	L				
an electrode terminal disposed	٠.	ŀ	1				- 1
near the distal end, and	2:21-63	2:41-3:58	3:1-32	2:28-55	669	2:7-46	1:61-2:12
0	ـنـــنــ		<u></u>				
a connector near the proximal				٠٠.	ľ	ŀ	
end of the stuff electrically							
coupling the electrode terminal	2:2]-63	2:41-3:58	3:1-32	2:28-55	669	2:7-46	1:61-2:12
to the electrosurgical power	l			•		[· .	1 1
supply;	L					·	
a return electrode electrically		:					' '
coupled to the electrosurgical	2:21-63	2:41-3:58	3:1-32	2:28-55	670	2:7-46	1:61-2:12
power supply; and						-	
an Electrically conducting fluid	_			l		1	1 1
supply for directing electrically		3:53	2:26	3:63, 2:1	672		
conducting fluid to the target					-		
site such that		احجنا	<u> </u>				
the electrically conducting fluid	i				• •	 -	
generates a current flow path				3:63, 2:1	672	í	
between the return electrode and		3:53	2:26	3:03, 2:1	6/2	1	1
the electrode terminal.	· ·]	· ·	ľ	i.	
					ļ .		· -
46 An electrosurgical system as							
in claim 45, wherein					 		
the return electrode forms a	3:17-23	3:35-57	2:63-3:5	3:37-64	l '	2:62-68	1:61-2:11
portion of the shaft of the	. 3:17-23	3:35-21	·322-22	357-04	l	2:02-00	1:01-2:11
electrosurgical probe. 47. An electrosurgical system as							
	6 .					l	
in claim 46 further including	. 1	* *	1 1		1		
L. S. Salis manihar					 	·	<u> </u>
an insulating member	3:17-23	3:35-57	1:42-50	3;37-64	ĺ	2:62-68	i. I
circumscribing the return	3:11-23	, Ye-ces	1.42-30	2-21-04	1	Zuz-va	
the return electrode being							
		-					1
sufficiently spaced from the						١. ا	ł I
electrode terminal to minimize		. 3:53					1 1
direct contact between the return	٠ ا						!
electrode and the patient's .		-					i l
tissue.							
55. The electrosurgical system	- 1	- 1					
of claim 45 wherein	لحيحا				<u> </u>		i

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Examples of where each limitation of the claims of the '536 patent may be found in each reference.

claim text \ reference	50	51	52	53	54	55	56
the electrode terminal comprises			l	L	1		!
a single active electrode disposed near the distal end of the shaft.	1:40-51	3:35-57	1:42-50	3:37-64	670		1:61-2:11
56. The electrosurgical system of claim 45 wherein							
the target site is selected from							l
the group consisting essentially of the abdominal cavity,		•					
thoracic cavity, knee, shoulder, hip, hand, foot, elbow, mouth,	2:2-20	1:9-12	1:5-9	1:9-15	669	1:52-55	1:50-58,
spine, ear, nose, throat,	•		. •				
epidermis and dermis of the						*	l .
natient's body	<u> </u>				ļ		
58. The electrosurgical system	- 1						ĺ
of claim 45 wherein					<u> </u>		
the frequency of the voltage applied between the return electrode and the electrode			1		669	•	
terminal is in the range of about							
20 kHz and 20 Mhz.					ļ		7.4
59. The electrosurgical system of Ethin 45 wherein				•	1		
one voltage applied between the			٧.				
electrode is in the range from 10	4	[672	8	
voits (RMS) to 1000 volts	. 1		. 1			· ., "	·

Exhibit B: Examples of where each limitation of the claims of the '536 patent may be found in each reference.

59	, 60. '	61	62	63
				1
	1			
••			i .	
	ì			-
•				
	1 15		1.1	
٠.	4:43	. 3:30	2:35	
3:5-36	3:35	3:30	2:20	
3:5-36	3:35	3:30	2:20	
		-		
		•		
		2.70	200	
3:3-36	333	3≟30	. 4:20	
٠.				
-				<u> </u>
	1.45	3-2n	2:35	
	. 7.75	3.50	233	
<u> </u>			-	
• .				
		•		!
•				
-	1 .			: .
٠.	'	5.		
	}			
-				
		~		
•	".m.cc		2.12.22	
. 1	3:32:00	l '	5:12-27	
	 '			 -
	٠.			1. 1
	l:	١		
_`				
	3-12-66		3:12:27	
•				
		-		·
. `	'			
	!			
-			Fig. 3	
				l
.			: :	
•			3 7	
	3:5-36	3:5-36 3:35 3:5-36 3:35 3:5-36 3:35 4:45	3:5-36 3:35 3:30 3:5-36 3:35 3:30 3:5-36 3:35 3:30 3:5-36 3:35 3:30 3:5-36 3:35 3:30 3:5-36 3:35 3:30 3:5-36 3:5-3	445 330 235 3536 335 330 220 3536 335 330 220 3536 335 330 220 445 330 235

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Examples of where each limitation of the claims of the 536 patent may be found in each reference.

claim text \ reference	57	58	59	60	61	62	63
the electrode terminal comprises							
a single active electrode				4:15-29	5:10-28	3:28-60	
disposed near the distal end of		l		1	3	220-05	l
the shaft.		l	·	I			-
56. The electrosurgical system			i		1		
of cinim 45 wherein							<u> </u>
the target site is selected from						l:	,
the group consisting essentially			1	[ŀ	
of the abdominal cavity,							
thoracic cavity, knee, shoulder,	4:20-5:5	:3:30-49 -	1:5-12			2:14-20	3:21-32
hip, hand, foot, elbow, mouth,	420-525	19,20-19.		l·_ ·		2	524-52
spine, ear, nose, throat,			L .			1	
epidermis and dermis of the					!		1 .
nationt's body.	,			<u></u>			
58. The electrosurgical system	٠.					,	
of claim 45 wherein			• !				<u> </u>
the frequency of the voltage		٠.				J	
applied between the return				1			
electrode and the electrode				. '	4:28-48		
reminal is in the range of about	٠	·]		l	
20 kHz and 20 Mhz.			•				
59. The electrosurgical system				1			
of Elaim 45 wherein		• • • • •	-				·
the voltage applied between the			• • •				i
electrode terminal and the return		٠.	: "			١.	
electrode is in the range from 10		٠.	•]	4:28-48		3:21-32
vajis (RMS) ta 1000 voits							
(r)Ms)				L			L

Exhibit B:
Examples of where each limitation of the claims of the '536 patent may be found in each reference.

•					ن		<u> </u>
claim text \ reference	64	65	66	67	68	69	76 ;
45. An electrosurgical system		1					
for applying electrical energy to		٠.			i	i .	
a target site on a structure within			1		i	! .	(
or on a patient's body, the		1	1	1	٠,		
system comprising:		l .					1
		5:34	2:1	2:35	3:25	3:20	2:38
a high frequency power supply;	. 25 -	3:34	. 21	2.53	دعديا	3.10	.Z.Ja ·
an electrosurgical probe-				•			
comprising a shall having a	1:25	5:34	3:14-	72:35	3:25 -	3:20	2:38
proximal end and a distal end,		Ŀ				<u> </u>	
an electrode terminal disposed			1 :		-	٠.	
	A:25	5:34	3:14	2:35 .	3:25	3:20	2:38
near the distal end, and					. •		-
a connector near the proximal					' '	()	*
end of the shaft electrically							
coupling the electrode terminal	4125 .	5:34	3:14	2:35	3:25	3:20	2:38
to the electrosurgical power							
supply;	• • •	:					
a return electrode electrically			l		3:25	3:20	
coupled to the electrosurgical	2:5.	5:34	2:1	2:35	3:25	3:20	2:38
power supply; and			· ·				<u> </u>
an electrically conducting fluid						1	j .
supply for directing electrically		2:10, 6:65	. 2:10	4:10	٠.	1	3:1
conducting fluid to the target	· :		l: •				
site such that			<u> </u>			<u> </u>	
the electrically conducting fluid			٠.				
generates a current flow path	1	2:10, 6:65	2:10	4:10		:	. 3:1
befuleen the return electrode and		2:10, 0.03	2.10	4.10			. 3-1
the electrode terminal.						1	
46 An electrosurgical system as							
in claim 45, wherein						[
the return electrode forms a .		3	·				
nortion of the shaft of the				4:37-52	4:33-43	,	2:37-46
electrosurgical probe.		~	l	02		l	7-7.14
47. An electrosurgical system as							
in claim 46 further including						-	
III Cloth 40 Images picteding						Į:	
an insulating member			•				
circumscribing the return	••			4:37-52	4:33-43		2:58-66
electrode.						Γ.	
the return electrode being							,
sufficiently spaced from the	1			r - I			
electrode terminal to minimize						ŀ:	
direct contact between the return					٠.		
electrode and the patient's					1		1
nissue.							
S5. The electrosurgical system							
of claim 45 wherein						(.	1
or eroms 43 Affection		٠				L	

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Examples of where each limitation of the claims of the '536 parent may be found in each reference.

claim text \ reference	64	65 -	66	67	68	69	70
the electrode terminal comprises a single active electrode	5:44-63	5:20-36	1:63-2:17	4:37-52	4:33-43	3:13-16	2:37-46
disposed near the distal end of the shaft.	3.41.45				Li_		
56. The electrosurgical system of claim 45 wherein							
the turget site is selected from			i			:	
the group consisting essentially of the abdominal cavity.			٠ .		·	` ·	
thoracic cavity, knee, shoulder, hip, hand, foot, cibow, mouth,	15:62-16:7			1:10-15			
spine, ear, nose, throat,	1		'			٠,	١. ا
epidermis and dermis of the	5	٠.			;		
58. The electrosurgical system			· · ·				
of claim 45 wherein							
the frequency of the voltage applied between the return	• •						
electrode and the electrode		6:25-40	٠. ا				
retininal is in the range of about 20 KHz and 20 Mbz.				•	·:		
59 The electrosurgical system of claim 45 wherein					··· ·		
the voltage applied between the electrode terminal and the return							
electrode is in the range from 10 volts (RMS) to 1000 volts							•
(RMS).			للبيل		L		L

-

Exhibit B:
Examples of where each limitation of the claims of the 536 patent may be found in each reference.

claim text \ reference	71	72	73	74
45. An electrosurgical system				ĺ
for applying electrical energy to			l	٠.
a target site on a structure within or on a patient's body, the			l	
or on a patient's body, the		٠.		1
system comprising:				
a high frequency power supply;	3:43-4:18	2:30	4:35	SN61173
an electrosurgical probe				
comprising a shaft having a	Figs. 1-6	2:30	4:35	SN61117
proximal end and a distal end,	1 "	١.		•
an electrode terminal disposed	Figs. 1-6	2:30	4:35	SN61187
near the distal end, and	1		***	·
a connector near the proximal.	, .			
end of the shaft electrically	l '	· ·		
coupling the electrode terminal	Figs. 1-6	2:30	4:35	SN61187
to the electrosurgical power		1	1	
smally:				
a return electrode electrically				
coupled to the electrosurgical	3:43-4:18	. 2:30	4:35	SN61173
ndifer snoply; and	·			
an electrically conducting fluid		i -		ł ·
suffily for directing electrically				SN61187
conducting fluid to the target				
sifesuch that		<u> </u>		
the electrically conducting fluid		. 1		
generates a current flow path				
between the return electrode and	•			SN61187
the electrode terminal.		٠. ١		
			•	
46-An electrosurgical system as	`		•	ľ
inskiin 45, wherein				
the return electrode forms a		1	5:36-58	SN61186
portion of the shall of the		١.	3:36-58	2001190
electrosurgical probe.				
47. An electrosurgical system as	!			1
in claim 46 further including			-	
an insulating member		. •	ا ۔۔۔۔ ا	
circumscribing the return			5:36-58	. SN61184
electrode,				
the return electrode being			٠.	
sufficiently spaced from the				
electrode terminal to minimize	- •	2:29-36		SN61173
direct contact between the return				
electrode and the patient's				٠.
tissue				
55. The electrosurgical system		;		
of claim 45 wherein	•			-

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Exhibit B:

Examples of where each limitation of the claims of the '536 patent may be found in each reference.

claim text \ reference	71	1 72	73	74
the electrode terminal comprises		1		
a single active electrode	3:43-53	2:36-41	6:8-22	SN61173
disposed near the distal end of	3:43-33	A-30-41	9:8-22	21401113
the shaft.	l		1	1
56. The electrosurgical system				
of claim 45 wherein		'	1	
the target site is selected from	1		1	
the group consisting essentially	l]	
of the abdominal cavity,	l		ľ	l .
thoracic cavity, knee, shoulder,	ļ. ·	2:63-68	3:26-34	SN61183
hip, hand, foot, elbow, mouth,	٠.	2:03-08	- 3:20-34	2001193
spine, ear, nose, throat,				i·
epidermis and dermis of the	1.			
natient's body.	- 1			L
58. The electrosurgical system		1		
of claim 45 wherein			-	
the frequency of the voltage				
applied between the return				F
electrode and the electrods	-		P.3	SN61173
reininal is in the range of about				
ZŰrHz and 20 Mhz.				
59 The electrosurgical system				
of thim 45 wherein				
the valtage applied between the				
electrode terminal and the return				
electrode is in the range from 10			6:23-33	SN61173
volts (RMS) to 1000 volts	1 1			
(RMS).				

Exhibit E: Anticipation and obviousness contentions

Smith & Nephew contends that the following claims are anticipated by at least each of the following primary references. Smith & Nephew reserves the right to supplement this contention in the event ArthroCare changes its construction of the asserted claims, or in the event the Court's construction of the asserted claims of in the event the Court's construction of the asserted claims of in the event the Court's construction of the asserted claims of in the event the Court's construction of the asserted claims of the event the Court's construction of the asserted claims of the event the Court's construction of the asserted claims of the event the Court's construction of the asserted claims.

Patent	Claim	References
536	45	8, 15, 22, 23, 26, 29, 31, 36, 38, 48, 51, 52, 74
	46	8, 15, 23, 29, 31, 48, 51, 52 .
	47	23, 31, 48, 51
	55	8, 15, 22, 23, 26, 29, 31, 36, 38, 48, 51, 52, 65
. —	56	8, 15, 26, 29, 31, 36, 38, 51, 52
	58	-22, 23, 26, 29, 38, 65
	59	22, 23, 26, 29
882	1	8, 15, 26, 38, 48, 51, 52, 65
-	13	15, 26, 52, 65
	17	26
	.18	26
	2!	26, 52
	23	8, 26, 38, 48, 51, 52, 65.
· · · ·	24	8, 26, 38, 48, 51, 52, 65
	28	8, 15, 26, 29, 74
	29	15, 26, 65
	47	26, 29, 38
	48	26, 29
	49	26, 29
	50	26, 29, 65
	54	48.
592	1 .	8, 15, 23, 26, 31, 34, 48, 51, 74
	3	8, 15, 23, 26, 31, 48, 51
	4	8, 15, 23, 26, 31, 48, 51
· · · ·	9:	8, 15, 23, 26, 31, 48, 51
	11	8, 23, 26, 31, 48, 51
	13	8, 15, 23, 26, 31, 48, 51
-	18	8, 15, 26, 48, 51
	21	23, 26
	23	8, 15, 23, 26, 31, 34, 48, 51, 74
<u>-</u> -	26	8, 15, 31, 48, 51
	27	8, 15, 31, 48, 51
	30	8, 15, 31, 48, 51
	30	0, 13, 31, 40, 31

	Patent	Claim	References
		32	8, 31, 48, 51
		34	8, 15, 31, 34, 48, 51
		39 .	8, 15, 48, 51
•		42	23, 26, 74

Smith & Nephew also contends that the following claims would have been obvious to one of ordinary skill in the art at the time of the invention in view of at least each of the following combinations of primary references, which Smith & Nephew contends would have been combined for at least the following reasons. Smith & Nephew reserves the right to supplement this contention in the event ArthroCare changes its construction of the asserted claims, or in the event the Court's construction of the asserted claims differs.

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2550100	CIALLIS GI	itua.	
Patent	Claim	Combinations .	Metivation to Combine
536	45	Any one or more of 10, 32, 34 with any one or more of the anticipating references listed above.	Each reference is directed to the same problem — applying electrical energy to a target site on a patient's body structure.
	46	10 with any one or more of 22, 26, 36, 38, 65; any one or more of the preceding with any one or more of the anticipating references listed above.	Each reference is directed to the same problem — applying electrical energy to a target site on a patient's body structure.
	47	Any one or more of 8, 15, 26, 29, 36, 52 with any one or more of 10, 34; any one or more of the preceding with any one or more of the anticipating references listed above.	Each reference is directed to the same problem — applying electrical energy to a target site on a patient's body structure.
		10 with any one or more of the anticipating references listed above.	Each reference is directed to the same problem — applying electrical energy to a target site on a patient's body structure.

Patent	Claim	Combinations	Motivation to Combine
	56	34 with any one or more of 48,	Each reference is directed to the
	1.	65;	same problem applying
0	1	any one or more of the preceding	electrical energy to a target site on
I		with any one or more of the	a patient's body structure.
l	i	anticipating references listed .	
	i	above.	
-	58	Any one or more of 8, 15, 31,	Each reference is directed to the
		48, 51, 52 with any one or-more	same problem - applying
	1 .	of the anticipating references	electrical energy to a target site on
	1 .	listed above.	a patient's body structure.
	59	32 with any one or more of 8,	Each reference is directed to the
١٠	1	15, 31, 38, 48, 51, 52, 65;	same problem - applying
l		any one or more of the preceding	electrical energy to a target site on
[-	with any one or more of the	a patient's body structure.
	1	anticipating references listed	
		above.	
882	1	10 with any one of more of 22,	Each reference is directed to the
	•	23, 29, 31, 34, 36;	same problem - applying
		any one or more of the preceding	electrical energy to a target site out
	1.	with any one or more of the	a patient's body structure.
	i	anticipating references listed	
	٠.	above	
	13	Any one or more of 10, 29 with .	Each reference is directed to the
1		any one or more of 8, 38, 48, 51;	same problem - applying
		any one or more of the preceding	electrical energy to a target site on
	5.	with any one or more of the	a patient's body structure.
		anticipating references listed	
		above.	
	17	Any one or more of 23, 29, 32	Each reference is directed to the
		with any one or more of 8, 15,	same problem applying
		38, 48, 51, 52, 65;	electrical energy to a target site on
		any one or more of the preceding	a patient's body structure.
		with any one or more of the :.	
	١	auticipating references listed	•
	Ι .	above.	
	18	Any one or more of 23, 29, 32	Each reference is directed to the
	1 1	with any one or more of 8, 15,	same problem - applying
		38, 48, 51, 52, 65;	electrical energy to a target site on
•		any one or more of the preceding	a patient's body structure.
		with any one or more of the	1.1
		anticipating references listed	
		above.	•

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		T	To 11 1	Motivation to Combine
ı	Patent	Claim	Combinations	
		21	Any one or more of 31, 36 with	Each reference is directed to the
- 1		1.	any one or more of 8, 15, 38, 48,	same problem — applying
	. •	-	51, 65;	electrical energy to a target site on
			any one or more of the preceding	a patient's body structure.;
- 1		ļ	with any one or more of the	
			anticipating references listed	
- 1		l	above.	
		23	Any one or more of 22, 23, 29;	Each reference is directed to the
1			31, 36 with 15:	same problem - applying
		٠.	any one or more of the preceding	electrical energy to a target site on
- 1			with any one or more of the	a patient's body structure.
			anticipating references listed	
- [•		above.	
ı		24	Any one or more of 22, 23, 29,	Each reference is directed to the
- !		1-1	36 with 15:	same problem applying
- 1		i	any one or more of the preceding	electrical energy to a target site on
- 1		Ι.	with any one or more of the	a patient's body structure.
a l	ľ.	l	anticipating references listed	a paddar a cooy an actual
t l		· ·	above.	y
ממככלם		28	Any one or more of 1:0, 22, 23,	Each reference is directed to the
2		- ·	31, 32, 34, 36, 38, 48, 51, 52	same problem - applying
2			with any one or more of the	electrical energy to a target site on
۲.		. 1	anticipating references listed	a patient's body structure.
1		. * 5/4	above.	
٦,		29	Any one or more of 10, 48, 52	Each reference is directed to the
انہ			with any one or more of 8, 29;	same problem applying
u I			any one or more of the preceding	electrical energy to a target site on
4			with any one or more of the	a patient's body structure.
	•		anticipating references listed	
3			above:	•
Į.			38, 51 with any one or more of	
- 1		-	the anticipating references listed	
- 1			above.	
.		47	Any one or more of 22, 31, 36-	Each reference is directed to the
- 1			with any one or more of 8, 15,	same problem - applying
Ξ١			48, 51, 52, 65;	electrical energy to a target site on
٠ ا			any one or more of the preceding	a patient's body structure.
- 1			with any one or more of the	a passon a boay actionity
- 1]		anticipating references listed	
- [above.	

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Patent	Claim	Cembinations	Motivation to Combine
	48	Any one or more of 23, 32 with	Each reference is directed to the
_	١ .	any one or more of 8, 15, 65;	same problem applying
•	1	any one or more of the preceding	electrical energy to a target site of
	1	with any one or more of the	a patient's body structure.
		anticipating references listed	
•		above.	
	49	32 with any one or more of 8,	Each reference is directed to the
	l	15, 65;	same problem applying
	[.	any one or more of the proceding	electrical energy to a target site of
		with any one or more of the	a patient's body structure.
		anticipating references listed	
		above.	
	50	Any one or more of 8, 15 with	Each reference is directed to the
	١.	any one or more of the .	same problem - applying
]	anticipating references listed	electrical energy to a target site of
		above	a patient's body structure.
	54	31 with any one or more of the	Each reference is directed to the
		anticipating references listed	same problem - applying
		above.	electrical energy to a target site of
			a patient's body structure.
592 -	1.	Any one or more of 10, 22, 29,	Each reference is directed to the
٠.,		32, 36, 38, 52 with any one or	same problem applying
	1	more of the anticipating	electrical energy to a target site of
		references listed above.	a patient's body structure.
	3	Any one or more of 22, 29, 36,	Each reference is directed to the
		52 with 34;	same problem - applying
•		any one or more of the preceding	electrical energy to a target site of
		with any one or more of the	a patient's body structure.
		anticipating references listed	
		above;	
		38, 65 with any one or more of	
:		the anticipating references listed .	
		above.	
	4.	Any one or more of 22, 29, 36,	Each reference is directed to the
	٠	38, 52, 65 with 34;	same problem - applying
		any one or more of the preceding	electrical energy to a target site of
		with any one or more of the	a patient's body structure.
		anticipating references listed	
	· .	above. · · ·	
- 1	9	Any one or more of 10, 22, 29,	Each reference is directed to the
-	- '}	36, 38, 52, 65 with 34;	same problem - applying
	. 1	any one or more of the preceding	electrical energy to a target site o
ĺ	**	with any one or more of the	a patient's body structure.
	1	auticipating references listed	
- '-		above.	

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	Patent	Claim	Combinations	Motivation to Combine
		11	Any one or more of 22, 29, 36,	Each reference is directed to the
		1	38, 52, 65 with any one or more	same problem applying
			of 15, 34;	electrical energy to a target site on
			any one or more of the preceding	a patient's body structure.
		-	with any one or more of the	
		ļ	anticipating references listed	1 . 1
	١.	ļ	above.	
		13	Any one or more of 22, 29, 36,	Each reference is directed to the
		İ	52 with 34;	same problem applying
		}	any one or more of the preceding	electrical energy to a target site on
		ŀ	with any one or more of the	a patient's body structure
			anticipating references listed	
			above.	
		18	Any one or more of 10, 38, 52, .	Each reference is directed to the
			65 with any one or more of 23,	same problem — applying
			31, 34;	electrical energy to a target site on
			any one or more of the preceding	a patient's body structure.
- 2			with any one or more of the	
3 ₂₂ [anticipating references listed	
5			above.	
openace		21	Any one or more of 29, 32 with	Each reference is directed to the
31	-1		any one or more of 8, 15, 31, 34,	same problem - applying electrical energy to a target site on
			48, 51; any one or more of the preceding	a patient's body structure.
ļ.			with any one or more of the	a patient s body structure.
<u>"</u>			anticipating references listed	
'n.		1	'above.	
L.		23	Any one or more of 10, 22, 29,	Each reference is directed to the
206 F		~	32, 36, 38, 52 with any one or	same problem - applying
5			more of the anticipating	electrical energy to a target site on
ŤU			references listed above.	a patient's body structure.;
1		26	Any one or more of 22, 23, 26,	Each reference is directed to the
ĺ	· • [29, 36, 52 with 34;	same problem - applying
- 1			any one or more of the preceding	electrical energy to a target site on
1			with any one or more of the	a patient's body structure.
- 1			anticipating references listed	
- 1		.	above:	· ·
- 1			38, 65 with any one or more of	
- 1		.	the anticipating references listed	
- 1	4		above.	
				

Patcut	Claim	Combinations	Motivation to Combine
	27	Any one or more of 22, 23, 26,	Each reference is directed to the
	1	29, 36, 38, 52, 65 with 34;	same problem - applying
	1	any one or more of the preceding	electrical energy to a target site on
	-	with any one or more of the	a patient's body structure.
	j	anticipating references listed	
-		above.	1
	30	Any one or more of 10, 22, 23,	Each reference is directed to the
	}	26, 29, 36, 38, 52, 65 with 34;	same problem - applying
	1	any one or more of the preceding	electrical energy to a target site on
	l	with any one or more of the .	a patient's body structure.
		anticipating references listed .	
	. :	above.	· ·
	32	Any one or more of 22, 23, 26,	Each reference is directed to the
	,	29, 36, 38, 52, 65 with any one	same problem — applying
	1 3	or more of 15, 34;	electrical energy to a target site on
	(any one or more of the preceding	a patient's body structure.
		with any one or more of the	
		anticipating references listed	
		above.	
	34	Any one or more of 22, 23, 26,	Each reference is directed to the
		29, 36, 52 with any one or more	same problem — applying
		of the anticipating references	electrical energy to a target site on
		listed above.	a patient's body structure.
	39	Any one or more of 10, 26, 38,	Each reference is directed to the
	1	52, 65 with any one or more of 31, 34:	same problem - applying
		any one or more of the preceding	electrical energy to a target site on a patient's body structure.
•		with any one or more of the	a panent s tody su ucture.
		anticipating references listed	
		above. ~	
	42	Any one or more of 23, 26, 29,	Each reference is directed to the
	72	32 with any one or more of	same problem - applying .
		8, 15, 31, 34, 48, 51;	electrical energy to a target site on
. 1		any one or more of the preceding	a patient's body structure.
		with any one or more of the	- parcon o coog su actual.
		anticipating references listed	** * .
		above:	

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UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: ASSISTANT COMMISSIONER FOR PATENTS

APPLICATION NOJ	FILING DATE	FIRST NAMED INVENIOR !	ATTORNEY DOCKET NO
CONTROL NO.		PATENT IN REEXAMINATION	
90/005,601	DECEMBER 30, 1999	5,697,536	16238-00610

ARTHROCARE CORPORATION 680 VAQUEROS AVENUE SUNNYVALE, CA 94085-3523

	EXAMINER .		
, MENDEZ, M.			
ART UNIT	PAPER		
3763	18		

DATE MARCH 14, 2003 AL

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

cc: William C. Fuess, 3rd party attorney

<u> </u>			
•		Control No.	Patent Under Reexamination
	Notice of Intent to Issue	90/005,601	
ŀ	Ex Parte Reexamination Certificate	Examiner .	Art Unit
		Manual Mendez	3763
	- The MARLING DATE of this communication appears of	n the cover sheet with the co	orrespondence address
	Prosecution on the merits is (or remains) closed in this e.		•
teober	ing at the initiative of the Office or upon petition. Cf. 37 CF	R 1.313(a). A Certificate will b	e issued in view of '
•	a) 🛭 Patent owner's communication(s) fied: 19 December	r 2002.	
. 0	b) Palent owner's late response filed;		
	c) 🔲 Falent owner's failure to file an appropriate respons	e to the Office action mailed; _	
	d) Patoni owner's failure to timely file an Appeal Brief	37 CFR 1.192).	
١ ،	e) 🗌 Other:,	•	. 8
	takes of Ex Parle Reexamination:	. :	
() Change in the Specification: 🗌 Yes. 🔲 No		
ŧ	g) Change in the Drawing: Yes, No		
. 1	h) Status of the Claim(s): (1) Patent claim(s) confirmed; 1-64,		
l	(2) Patent claim(s) amended (including dependent of	a amondad elalmicily	
1	(3) Patent claim(s) cancelled:	il Billetiona Camiq-//.	
1	(4) Newly presented claim(s) patentable:		
l	(5) Newly presented cencelled cishnet	•	
2 🛭		neller confirmation. Any comm	ents considered necessary by
	patent owner regarding reasons for patentiability and/or co		
1	delays, Such submission(s) should be lebeled: "Commen	is On Statement of Reasons fo	r Patentability and/or
1	Confirmation.*		
3.	Note attached NOTICE OF REFERENCES CITED (PTO-	₹ 92).	•
4. 🛛	Note attached LIST OF REFERENCES CITED (PTO-144	9).	
5.0	The drawing correction request filed onis: ap	proved disapproved.	
6.	Acknowledgment is made of the priority claim under 35 U	S.C. § 119(a)-(d) or (f).	-
	a) All b) Some c) None of the certified		
	been ruceived.	•	
l	not been received,		
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REEXAMINATION OF U.S. PATENT NUMBER 5,697,536

STATEMENT OF REASONS FOR PATENTABILITY AND/OR CONFIRMATION

The following is an examiner's statement of reasons for patentiability end/or confirmation of the claims found patentable in this reexamination proceeding:

The examiner of record concurs with the arguments presented by the patent owner on paper number 15. Accordingly, it is concluded that claims 1-64 are allowable over the prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel Mendez whose telephone number is 703-308-2221. The examiner can normally be reached on 0730-1800 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Brian Casler can be reached on 703-308-3552. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3590 for recular communications and 703-305-3590 for After Final communications.

BRIAN L CASLEN
SUPERVISORY PATENT EYSSINE
TECHNOLOGY CENTER 37(3)

March 4, 2003

Manuel Mendez Primary Examiner Art Unit 3763

> ANGELA D. SYKES SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700

.:		.	. T O			
FORM PTO-14	49 (Hodifiad)		Attorney Docket No.	Patent No.: 5,697,536		,536
AFPLICANT'S	THE AND PUBLIC INFORMATION D	ISCLOBURE	16238-000610			. "
		`	Applicant: PHILIP B.	EGGERS et	*1.	
			Issue Date: December 16, 1997	Group:		
Reference I	esignation	.a.	AYZEMA DOCCINCHAS.			
Examiner Initial	Document No.	Date	Karoa	Class	Sub- class	Filing Date
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19	OTHER ART (Including Auth	or, Title, Date, Perti	neut Page	s, Rtc.}	
* Paul	Correspondence 1991 (3pgs)	from C. Large	on Dept. of Health & H	uman Serv.	ices dated	April 22,
AK AK	Summary of Sat	ety and Effect	ive Information (2pgs) ·		
37	Correspondence 12, 1985	from R. Brita	in Dept. of Health & .	Human Ser	vices date	d August
S2/24	Correspondence	from J. Malia	Valley Porge dated J	uly 25, 1	985 (3pgs)	
X)an	L. Malis J. No	urosuzg. Vol.	85. pp. 970-975 (1996	1.		
X AO	Excerpt from a		Galis, MD 1995 Americ	an Assoc.	of Neuro	ogicla
AP	L. Malis The 1	Value of Irriga	tion During Bipolar C	oagulatio	n (1pg)	
ZZAQ	L. Malis New :	rends in Micro	surgery and Applied T	achnology	(pgs 9-16	i)
X AR	Codman Bipola	Flectrosurge	ry Products brochure (8 pgs)		
As						
X pr	"Valley Forge"	s new product:	" Clinica Vol. 475, p	. 5 (1991)	
SAU (The MAKES BIP	lar Electrosu	rgical Systems CMC-II	(Catalog	80-1170)	14 pgs
EXAMINES	almx.	DATE	CONSTREED TERMA	W 25	2003	

EXMINES Initial if reference considered, whether or not citation is in conformance with MPFF 605; braw line through citation if not in conformance and not commidation. Jackete copy of this form with next commidation to applicant.



AD FREDINAGO SALVAYS ORANDARIO

TO ALL DO VHOLITHESE: PRESENTS SHALL COME? UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office

February 19, 2003

THIS IS TO CERTIFY THAT ANNEXED IS A TRUE COPY FROM THE RECORDS OF THIS OFFICE OF THE FILE WRAPPER AND CONTENTS OF:

APPLICATION NUMBER: 08/561,958 FILING DATE: November 22, 1995 PATENT NUMBER: 5,697,882 ISSUE DATE: December 16, 1997

> By Authority of the COMMISSIONER OF PATENTS AND TRADEMARKS

> > M. K. HAWKINS

Certifying Officer

MAR, 25.1957 8:329M

I hereby cortify that this correspondence is being sent by factivitie transmission to: Examiner M. Map Fax No.: 1-705-308-308 Assistant Compissioner for Pacents, Unihitation, D.C. 20231

March Et. 1997

Attorney Docket No. 16238-

TOWNSEND and TOWNSEND and CHEW LLP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE .

In re application of:

PHILIP E. EGGERS et al.

Application No.: 08/561,958

Piled: November 22, 1995

For: SYSTEM AND METHOD FOR ELECTROSURGICAL CUTTING AND) ABLATION

Examiner: MENDEZ, M.

Art Unit: 3306

SUPPLEMENTAL AMENDMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir: .

Before action on the merits, please amend the above identified application as follows.

P 30017 04/14/97 08561958

20-1430 030 204 H30.00CH

IN THE SPECIFICATION:

On page 13, line 14, delete the word "using",

On page 18, line 27, delete "voltages" and insert --

voltage---

On page 21, line 5, between "occurring" and "the region... insert --in--, so that it reads --occurring in the region

PHILIP E. EGGERS et al. Application No.: 08/561,958 Page 2 PATENT

On page 22, line 36, delete "current" and insert --

On page 23. line 12, delete the word "laser".

On page 32, line 31, insert --return-- before the word "electrode".

IN THE CLAIMS:

Please cancel claims 1-21, 28, 36, 37, 36-38, and 57. Please amend claims 23-28, 31, 32, 34, 35, 39-56, 58 and 59 as follows. Please add claims 80-105. All claims have been set forth for convenience of reference.

Please cancel claims 1-22.

(Twice Amended) A method for applying energy to a target site on a patient body structure comprising:

providing an [active] electrode <u>terminal</u> and a return electrode electrically coupled to a high frequency voltage source;

positioning the active electrode in close proximity to the target site in the presence of an electrically conducting <u>terminal</u> [liquid]; and

applying a high frequency voltage between the [active] electrode terminal and the return electrode, the high frequency voltage being sufficient to vaporize the fluid [liquid] in a thin layer over at least a portion of the [active] electrode terminal and to induce the discharge of energy to the target site in contact with [from] the vapor layer.

(Twice Amended) The method of claim 22 wherein the [active] electrode terminal comprises an electrode array including a plurality of isolated electrode terminals.

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	PHILIP E. BGGERS et al. Application No.: 08/561,958
1 2 3 4 4 1 2 2 3 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13 25. (Amended) The method of claim 25 wherein [the] at least a portion of the energy induced [from the vapor layer] is in the form of photons having a wavelength in the ultraviolet spectrum. 14 26. (Amended) The method of claim 25 wherein at least a portion of the energy [induced from the vapor layer] is in the form of energetic electrons. 3 27. (Amended) The method of claims 24 wherein the
3	isolated electrode terminals each have a contact <u>purface</u> area <u>in</u> <u>the range of about 0.25 mm² to 50.0 mm² [below 15 mm²].</u>
3	26. (As Filted) The sorthod of claim 26 wherein the isolated electrode terminals have cilcular contact surfaces with an area in the range from 0.01 ms to 1 ms. Pleases cancel claims 29 and 30.
B 3 2	5 32: (Amended) The method of claim 24 wherein the clectrode terminals are spaced from each other a distance of about 0.0005 to 2.0 [5 to 0.01] mm.
1 2	12. (As Filed) The method of claim 24 wherein the electrode array is disposed over a dixtal tip of an electrosumyical probe. Please cancel claim 33.
1 2 2 3	14. (As Filed) The method of claim 24 wherein the electrode terminals comprise a material with a relatively low thermal conductivity. 15. (As Filed) Was method of claim 34 wherein the electrode materials comprise a material elected from the group consisting of titanium, tungsten, platinum, aluminum, and tantalum.
	Please cancel claims 36-38.

		PHILLP E. EGGRS et al. Application No.: 08/561,958 Page 4
	1	1 25. (Amended) The method of claim 23 wherein the high
	2	frequency voltage is at least 200 [300] volts peak to peak.
B.	1 2 3	/5 -0. (Amended) The method of claim 2 wherein the voltage is in the range from 500 [600] to 1400 volts peak to peak.
BB4	2 3	(Ampoid) 14.7. (NO Filled) The method of claim 25 wherein the [sctive) electrode terminal is positioned between 0.02 to 5 mm from the target site.
B5	2 3	70 st. (Amended) The method of claim 25 wherein the vapor layer has a thickness of about 0.02 to 2.0 mm (10 to 400 micronel.
136	1 2 3 4 5	DAY. (Twice Amended) The method of claim 28 wherein the distance between the most proximal portion of the [active] electrode terminal [surface] and the most distal portion of the return electrode is [surface are spaced apart by a distance] in the range from 0.5 [1] to 10 mm.
	1 2	M. (As Filed) The method of claim 24 wherein the return electrode has a distal end positioned proximal to the electrode array.
	1	225. (Twice Amended) The method of claim 23 wherein
	3	the [active] electrode terminal [surface] and the return electrode are of comparable size and comprise a bipolar array of
131	4	isolated electrode terminals which both come in close proximity
0.	5	or in contact with the body structure.
	1	13 x6. (Amended) The method of claim 28 wherein the
1	3	liquid phase of the electrically conducting fluid [liquid] has a conductivity greater than 2 mS/cm.
ДÞ	3	Conductivity greater than 2 majem.
1d	1	2437. (Amended) The method of claim 28 wherein the
	2	liquid phase of the electrically conductive fluid [liquid]
	3	comprises isotonic saline.
	- 1	

	PHILIP E. EGGERS et al. Application No.: 08/561,958 Page 5
1	28 Fas. (Twice Amended) A method for applying energy to a
. 2	target site on a patient body structure comprising:
3	providing an [active] electrode terminal and a return
4	electrode electrically coupled to a high frequency voltage
5	source;
6	positioning the [active] electrode terminal in close
. 7	proximity to the target site in the presence of an electrically
19 a	conducting fluid [liquid]; and
وازا	applying a high frequency voltage between the [active]
10	electrode terminal and the return electrode, the high frequency
. 11	voltage being sufficient to impart sufficient energy into the
12	target site to ablate [several cell layers of] the body structure
_ 1,3 .	without causing substantial tissue necrosis below the surface of
14	the body structure underlying the ablated body structure [beyond
15	the several cell layers].
	37.28
	19 28 48. [Amended] The method of claim 48 wherein the
2	applying step comprises:
3	vaporizing the electrically conducting fluid [liquid]
4	in a thin layer over at least a portion of the [active] electrode
5	terminal [surface]; and
6	inducing the discharge of photons to the target site in
nD"	contact with Ifrom the vapor layer.
<i>16</i> "	30 34
0 . 1	50. (Amended) The method of claim At wherein the
2	applying step comprises:
3	vaporizing the electrically conducting <u>fluid</u> [liquid]
4	in a thin layer over at least a portion of the active electrode
5	surface; and
6	inducing the discharge of energetic electrons to the
7	target site in contact with [from] the vapor layer.
T 1	51. (As Filed) The method of claim 46 wherein the depth of
1 2	necrosis is 0 to 400 micronk -
11. 1	24 30 52. (Twice Amended) A method for applying energy to a
RIT 2	target site on a patient body structure comprising:
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Cil	

PHILIP E. EGGERS et al. Application No.: 08/561,958 Page 6 PATENT

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providing an active electrode and a return electrode electrically coupled to a bigh frequency voltage source; positioning the [active] electrode <u>terminal</u> in close

positioning the [active] electrode <u>Terminal</u> in close proximity to the target site in the presence of an electrically conducting fluid [Liquid]; and applying a high frequency voltage between the [active]

electrode terminal and the return electrode, the high frequency voltage being in the range from 500 [600] to 1400 volts peak to peak.

53. The Filed) The method of claim 57 wherein the high frequency voltage is in the range from 700 to 900 volts peak to peak.

32 54.54. (Twice Amended) A method for applying energy to a target site on a patient body structure comprising; providing an active electrode electrically coupled to a

high frequency voltage source;

positioning the factivel electrode terminal in close
proximity to the target site in the presence of an electrically
conducting fluid (liquid), and

generating a voltage gradient between the [active] electrode terminul and tissue at the target site, the voltage gradient being sufficient to create an electric field that cause the breakdown of Dreaks down the) tissue through molecular dissociation or disintegration.

33 55. (Twice Amended) The method of claim 54 wherein the generating step comprises:

providing a return electrode electrically coupled to a high frequency voltage source:

applying a high frequency voltage between the [active] electrode terminal and the return electrode; and vaporizing the electrically conducting <u>fluid</u> [liquid] in a thin layer over at least a portion of the [active] electrode <u>terminal</u> [surface].

	PHILIP E. EGGERS et al. Application No.: 08/561,958 Page 7
1	Y 56: (Amended) The method of claim 55 further
132	1
1/2	comprising developing a film layer of vapor between the active
12 3	electrode and the body structure [tissue] at the target site.
L	Flease cancel claim 57.
1	5 9 se. (Amended) The method of claim 55 further
2	comprising cooling the tissue with the electrically conducting
3	fluid [liquid] to reduce the temperature rise of those portions
4	of the body structure adjacent the target site [shield the tissue
. 5	from the high frequency voltage].
216	75 35
13/1-1	(Amended) The method of claim 58 wherein the
2	cooling step includes translating the distal surface [tip] of the
3	electrode terminal [probe] over the target site to allow the
4	electrically conducting fluid [liquid] to contact the tissue
5	after the tissue has been subjected to the electric field [high
6 1	frequency voltagel.
6	frequency voltagel.
6	frequency voltagel. Please cancel claims 65-79, as they have been
6	
6	Please cancel claims 65-79, as they have been
-	Please cancel claims 65-79, as they have been
	Please cancel claims 66-75, as they have been restricted out.
1	Please cancel claims 66-79, as they have been restricted out. Please add claims 80-105.
	Please cancel claims 66-79, as they have been restricted out. Please add claims 80-105.
1	Please cancel claims 66-79, as they have been restricted out. Please add claims 80-105.
1 2	Please cancel claims 66-79, as they have been restricted out. Please add claims 80-105.
1 2 3	Please cancel claims 60-79, as they have been restricted out. Please add claims 80-105. Please add c
1 2 3 4	Please cancel claims 60-79, as they have been restricted out. Please add claims 80-105.
1 2 3 4 5	Please cancel claims 60-79, as they have been restricted out. Please add claims 80-105. Please add claims 80-105. Please add claims 80-105. Please add claims 80-105. Ref. (New) The method of claim is wherein the electrode height of the most distal portion of the electrode terminal relative to the wost proximal portion of the electrode terminal exposed to the electrically conducting fluid is in the range from 0.0 to 2.0 mm. PM-29 New) The method of claims 23 and 48 wherein the
1 2 3 4 5	Please cancel claims 66-79, as they have been restricted out. Please add claims 80-105. Please add c
1 2 3 4 5	Please cancel claims 60-79, as they have been restricted out. Please add claims 80-105. Please add claims 80-105. Please add claims 80-105. Please add claims 80-105. Ref. (New) The method of claim is wherein the electrode height of the most distal portion of the electrode terminal relative to the wost proximal portion of the electrode terminal exposed to the electrically conducting fluid is in the range from 0.0 to 2.0 mm. PM-29 New) The method of claims 23 and 48 wherein the
1 2 3 4 5	Please cancel claims 60-79, as they have been restricted out. Please add claims 80-105. Please add c
1 2 3 4 5 5 1 2 3 3	Please cancel claims 60-79, as they have been restricted out. Please add claims 80-105. Please add c
1 2 3 4 5 5 1 2 3 4 4	Please cancel claims 60-79, as they have been restricted out. Please add claims 80-105. Please add c

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PHILIP E. EGGERS et al. Application No.: 08/561,958 Page 8 PATENT

Mr. (New) The method of claim er wherein the inorganic material is selected from the group consisting essentially of ceramic, glass and glass/ceramic compositions.

as. (New) The method of claim at wherein the electrode height of the most distal portion of any of the electrode terminals relative to the most proximal portion of said electrode terminals exposed to the electrically conducting fluid is in the range from 0.0 to 2.0 mm.

electrode terminals are surrounded and supported by an insulating matrix at or near the distal tip of the probe to electrically isolate proximal portions of the electrode terminals from the electrically conductive fluid, the insulating matrix comprising an inorganic material.

95. (New) The method of claim */ wherein the inorganic material is selected from the group consisting essentially of ceramic, glass and glass/ceramic compositions.

39 AR Set (New) The method of claim pr wherein the distal surface of the electrode terminal is recessed below the surface of the innulating matrix by a distance from 0.01 mm to 1.0 mm.

your (New) The method of claim at wherein the distal surface of the electrode terminal is flush with the surface of the insulating matrix.

4) the method of claims 48 and 54 wherein the

security of isolated electrode terminals.

providing a return electrode electrically coupled to a higher frequency voltage source;

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PHILIP E. EGGERS et al. Application No.: 08/561,958 Page 9

PATENT

applying a high frequency voltage between the return electrode and the array of electrode terminals; and vapoxizing the electrically conducting fluid in a thin layer over one or more of the electrode terminals of the array.

93 47 98. (New) The method of claim 29 further comprising developing a film layer of vapor between one or more of the electrode terminals and the target site.

cooling the tissue with the electrically conducting fluid to reduce the temperature rise of those portions of the body structure adjacent the target site.

27. (New) The method of claim 26 wherein the energy of the energetic electrons is sufficient to cause disassociation or disintegration of molecules of the body structure.

ys 34. (New) The method of claims as and by wherein the density of the vapor layer is less than about 1020 atoms/cm.

95. (New) The method of claims 24 and 50 wherein the electrods teiminal is configured to promote bubble nucleation causing the formation of the vapor layer.

98. (New) The method of claims 25 and 38 wherein the electrode terminal has a contact surface area in the range of about 0.75 and to 50 mm.

of. (New) The method of claims 47 and 87 whorein the high frequency voltage is at least 200 volts peak to peak.

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PHILIP E. EGGERS et. al. Application No.: 08/561,958 Page 10 (New) The method of claims 45 and 52 wherein the high frequency voltage is in the range from about 500 to 1400 volts peak to peak. 50278 (New) The method of claims 48 and 52 wherein the electrode terminal is positioned between 0.02 to 2.0 mm from the target site. 200 26 51 118 165. (New) The method of claims 48 and 52 wherein the ctrode terminal and the return electrodes comprise a bipolar array of isolated electrode terminals. 181. (New) The method of claims 23 and A6 f comprising cooling the tissue with the electrically conducting fluid to reduce the temperature rise of those portions of the body structure adjacent the target site. 53 -46 102. (New) The method of claim 101 wherein the cooling step includes translating the distal surface of the active electrode over the target site to allow the electrically conducting fluid to contact the tissue after the tissue has been subjected to the electric field. 2135 103. (New) The method of claims 23 and 48 further comprising evacuating fluid generated at the target site with a suction lumen having a distal end adjacent the electrode terminal. 105. (New) The method of claims 23 and 48 wherein the target site is a tumor within or on the patient's body. 28 34 *च्य* य (New) The method of claims AB and 5% wherein the electrode terminal comprises an electrode array including a

plurality of isolated electrode terminals .--

PHILIP E. EGGERS et al. Application No.: 08/561,958 Page 11 PATENT

REMARKS

Claims 23-105 are pending.

Applicants have cancelled claims 1-22 and 29, 30, 33, 36-38 and 57, and prepared a few minor amendments to the remainder of the claims. In addition, dependent claims 80-105 have been added to further claim the features of the present invention. Applicants note that these features are fully described in the present invention and no new matter has been entered.

In view of the foregoing, Applicants believe all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (#15) 326-2400.

Respectfully submitted,

John f. Raffle Reg. No. 38,589

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01/14/1998 EPOIN 61 FC:145

145-10 COFC #18

PATENT

Attorney Docket No. 16238-000700

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:

PHILIP E. EGGERS et al.

x elicockersistrate .: 5,697,882

Issue Date: December 16, 1997

For: SYSTEM AND METHODS FOR ELECTROSURGICAL CUTTING AND ABLATION FEB 1 2 1992

PATENIS & TRADEMARKS
REQUEST FOR
CERTIFICATE OF CORRECTION
UNDER 37 CFR \$1.323

Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

Pursuant under 37 CFR \$1.323, Applicant signits a Certificate of Correction amending claim 23. These mendents to claim 23 have been made to correct typographical errors that were made in Applicant's Amendment filed on March 25, 1997. During that amendment, Applicant amended all of the claims to replace the term "liquid" with "fluid". In addition, Applicant amended all of the claims to replace the term "active electrode" with "electrode terminal".

In claim 23, however, Applicant mistakenly forgot to replace the term "active electrode" with "electrode terminal" on line 5. This term on line 5 derives antecedent basis from "an electrode terminal" on line 3 (also note the reference to electrode terminal on lines 7 and 9 of claim 23). Accordingly, in order to correct this error in antecedent basis, Applicant wishes to change "active electrode" on line 5 to "electrode terminal".

Patent No. 5,697,882 Philip E. Eggers et al. Page 2

Similarly, on line 6 of claim 23, Applicant replaced "liquid" with "terminal" instead of replacing it with "fluid" as in the rest of claim 23, and the rest of the claims. In particular, note line 8 of claim 23 which refers to the fluid, clearly deriving antecedent basis from an earlier recitation of "fluid" in the claim. This antecedent basis must come from line 6. In addition, note dependent claims 46 and 47, which also refer to the electrically conductive fluid. These claims depend from claim 23. Finally, Applicant points out that the rest of the independent claims in this application (Claims 48, 52 and 54 were amended to recite the step of "positioning the electrode terminal in close proximity to the target site in the presence of an electrically conducting [liquid] fluid".

Accordingly, it should clearly be seen that the above changes merely correct typographical errors made by the Applicant during prosecution of this case.

The desired corrections are set forth on form PTO 1050 enclosed herewith.

Enclosed is a check in the amount of \$100.00, pursuant to 37 CFR \$1.20(a).

Respectfully submitted,

John T. Raffle Reg. No. 38,585

ArthroCare Corporation 595 N. Pastoria Avenue Sunnyvale, California 94086 (408) 736-0224

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 5,697,882

DATED : December 16, 1997

INVENTOR(S): Philip E. Eggers et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

IN THE CLAIMS:

23. A method for applying energy to a target site on a patient body structure

comprising:

providing an electrode terminal and a return electrode electrically coupled to a high frequency voltage source;

positioning the [active] electrode terminal in close proximity to the target site in the presence of an electrically conducting [terminal] fluid; and

applying a high frequency voltage between the electrode terminal and the return electrode, the high frequency voltage being sufficient to vaporize the fluid in a thin layer over at least a portion of the electrode terminal and to induce the discharge of energy to the target size in contact with the vapor layer.

Mailing address of sender:

Patent No. 5,697,882

0, 50 t per pag ⊕ 50 ¢ per pag → ___0

John T. Raffle ARTHROCARE CORPORATION 595 N. Pastoria Avenue Sunnyvale, California 94086

PTO Form 1050 (modified); Atry Docker No.: 16238-000700

NOTICE RE: CERTIFICATES OF CORM :ON	#16		
DATE : 2-2-97			
TO : Supervisor, An Unit Mendez 3308			
SUBJECT: Certificate of Correction Request in Patent No. 569785	12		
A response to the following question(s) is requested with respect to the accompanying requ	uest for a certificate of correction		
1. Would the change(s) requested under 37 CFR 1.323 constitute new maner			
Would the change(1) requested under 37 CFR 1.323 Materially affect the s by the examiner in the patent?	cope or meaning of the claims allowed		
3. Applicant disagrees with change(1) initialed and duted by Examiner in lieu the change request be granted?	of an Examiner's Amendment, Should		
4. With respect to the change(s) requested, correcting Office errors, should the of correction?	e patent read as shown in the certificate		
5. If the amendment filedbad been considered amendment have been enteres?	by the Examiner, would the		
PLEASE RESPOND WITHIN 7 DAYS AND RETURN THE FILE TO ROOM 918, P			
RUSH	Legal Instrument Expelier		
MUSIT.	**		
TO: CERTIFICATE OF CORRECTION BRANCH	DATE:		
The decision regarding the change(s) requested in the certificate of correction is shown below.			
LYES# NO Comments below			
2.YES NO Comments below			
3.YES NO Comments below			
4.YES NO Comments below			
5.YES NO Comments below	/		
Comments NO COMMENTS NETESCAM -			
lw.	3 30 6		
\ Z/h / 9/ \			

UNITED STATE ATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 5,697,882

December 16, 1997

DATED

INVENTOR(S) : Philip E. Eggers, et. al.

It is confifted that error appears in the above-identified patent and that said Letters Patent in hereby corrected as shown below:

IN THE CLAIMS:

23. A method for applying energy to a target site on a patient body structure

comprising:

providing an electrode terminal and a return electrode electrically coupled to a high frequency voltage source; bigh frequency voltage source;

the presence of an electrically conducting Iterminal) fluid; and

applying a high frequency voltage between the electrode terminal and the return electrode, the high frequency voltage being sufficient to vaporize the fluid in a thin layer over at least a portion of the electrode terminal and to induce the discharge of energy to the target site in contact with the vapor layer.

Signed and Sealed this

Seventh Day of April, 1998

THUCE LEHMAN

Commissioner of Pasents and Trademarks

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that copies of the foregoing were caused to be served this 9th day of July, 2003, upon the following in the manner indicated:

BY HAND

William J. Marsden, Jr. FISH & RICHARDSON 919 N. Market Street Wilmington, DE 19801

Steven J. Balick Ashby & Geddes 222 Delaware Avenue P.O. Box 1150 Wilmington, DE 19899

BY FEDERAL EXPRESS

Mark J. Hebert Fish & Richardson 225 Franklin St. Boston, MA 02110

Kurtis D. MacFerrin Fish & Richardson 500 Arguello St., Ste. 500 Redwood City, CA 94063

Karen Jacobs Louden

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that copies of the foregoing were caused to be served this 11th day of July, 2003, upon the following in the manner indicated:

BY HAND

William J. Marsden, Jr. FISH & RICHARDSON 919 N. Market Street Wilmington, DE 19801

Steven J. Balick Ashby & Geddes 222 Delaware Avenue P.O. Box 1150 Wilmington, DE 19899

BY FEDERAL EXPRESS

Mark J. Hebert Fish & Richardson 225 Franklin St. Boston, MA 02110

Kurtis D. MacFerrin Fish & Richardson 500 Arguello St., Ste. 500 Redwood City, CA 94063

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Third, there is no evidence that Messrs. Raffle or Bagade – or anyone at ArthroCare – had, or were even aware of the contents of, Smith & Nephew's summary judgment motions or Dr. Taylor's report. Indeed, because Smith & Nephew designated its summary judgment briefs and expert reports as "highly confidential" under the Protective Order (e.g., D.I. 262-68, 302), they could not be disclosed to any ArthroCare employees. 19 Absent evidence that Mr. Raffle or Mr. Bagade know of the allegedly withheld information, there can be no finding of inequitable conduct. See FMC Corp., 835 F.2d at 1415 ("Applicant must be chargeable with knowledge of the existence of the prior art or information, for it is impossible to disclose the unknown."); Nordberg, Inc. v. Telsmith, Inc., 82 F.3d 394, 397-98 (Fed. Cir. 1996) (stating that while a company might possess information, there can be no culpable intent in withholding information that those under a duty of disclosure did not know). 20

2. Failure to disclose the immaterial Roos declaration is not inequitable

Smith & Nephew also argues that "ArthroCare" committed inequitable conduct during the '536 reexamination by failing to disclose the Roos Declaration – another document not in the record. (D.I. 442 at 3, 21.) That argument also fails.

First, the Roos Declaration – a litigation-induced attempt to add "electrically conductive fluid" to the Roos '198 patent – is immaterial as a matter of law. This is because an inventor cannot add to the disclosure in a patent through post hoc declarations. See Lear Siegler, Inc. v.

In fact, the Marsden Declaration filed in support of Smith & Nephew's brief (D.I. 443) was also filed under seal. The only document attached to that declaration that is marked confidential is Dr. Taylor's expert report.

Smith & Nephew argues that the fact that the briefs and report were marked "highly confidential" is not an excuse for faiting to submit them to the Patent Offlice. (J. 442 at 24-26.) That argument, however, misses the point – Messrs. Raffle and Bagade could not disclose that which they did not possess and Smith & Nephew offered no evidence at trial that these attorneys possessed these documents.

Raffle was trying to broaden claim 1 so that ArthroCare could sue Ethicon (D.I. 442 at 36) is unsupported by any evidence in the record. If the corrections to claim 1 had been motivated by impending litigation, Mr. Raffle surely would have corrected application claim 52 in the same manner Smith & Nephew alleges "broadened" claim 1. He did not.

Smith & Nephew's second allegation with respect to the '882 patent is that Mr. Raffle committed inequitable conduct by contending that there was no antecedent basis in application claim 23, but failing to point out that there was also an improper autecedent basis in application claim 52 that supposedly was "acceptable" to ArthroCare. (D.I. 442 at 31-32.) There is simply no evidence (much less clear and convincing evidence) that the antecedent basis issue in application claim 52—which the examiner could see for himself—was acceptable to ArthroCare, nor is there any evidence that Mr. Raffle's failure to correct application claim 52 was anything other than an honest mistake. That mistake does not establish intent to deceive. Indeed, the suggestion that Mr. Raffle consciously accepted the error in claim 52 is inconsistent with Smith & Nephew's theory that Mr. Raffle was motivated to craft claims that would read on Ethicon's products. Under this theory, if Mr. Raffle were aware of the "three electrode" problem in claim 52, he surely would have corrected it to cover Ethicon's "two electrode" products.

Smith & Nephew's final allegation with respect to the '882 patent is that Mr. Raffle committed inequitable conduct by failing to explain that the Certificate of Correction would broaden the scope of the claim. (D.I. 442 at 32-35.) This argument also fails. Because – as the jury found – Mr. Raffle's errors were clerical or typographical, whether the Certificate of Correction broadened the scope of the claims is irrelevant. See Superior Fireplace Co. v. Majestic Prods. Co., 270 F.3d 1358, 1370 (Fed. Cir. 2002) ("[W]e interpret [35 U.S.C.] § 255 to ...

allow broadening corrections of clerical or typographical mistakes."). In addition, the Certificate

misrepresentation about the significance of the Roos '198 patent to the '592 patent makes it less likely that the '882 and '536 patents will be subject to reexamination, and has the potential to taint the reexamination of the '882 and '536 patents. (D.J. 442 at 38.) First, the '882 and '536 patents issued years before ArthroCare knew of the Roos '198 patent. See Dayco, 329 F.3d at 1366 n.4 (no inequitable conduct where patent issued before patentee was aware of undisclosed prior art). Second, there is no evidence that the Roos '198 patent is even relevant to the '592 and '882 patents — Smith & Nephew did not assert the Roos '198 patent against the '592 or '882 patents at trial. (Tr. at 1728.) Third, Smith & Nephew's speculation as to what might happen during a future reexamination of the '882 and '536 patents does not rebut the presumption that the examiners involved in those proceedings will conduct independent analyses of those patents and the prior art.

B. ArthroCare's Alleged Conduct During The '536 Reexamination Cannot Render The '592 Or '882 Patents Unenforceable

Smith & Nephew's second argument is that ArthroCare's failure to provide Smith & Nephew's litigation-related documents in the '536 reexamination renders the '592 and '882 patents unenforceable because those documents provide information concerning prior art references that are material to the '592 and '882 patents. (D.I. 442 at 39.) Acts of alleged inequitable conduct related to the '536 reexamination, however, cannot "infect" the previously-issued '592 and '882 patents. See SSIH Equip. S.A. v. United States Int'l Trade Comm'n, 718 F.2d 365, 378-79 (Fed. Cir. 1983) (finding no infectious unenforceability where allegedly "infected" patent issued three years before the prosecutions in which inequitable conduct occurred had commenced); Dayco, 329 F.3d at 1366 n.4 (finding no inequitable conduct because patent issued two months before alleged improper act). In addition, the alleged failure to disclose Smith & Nephew's litigation-related documents during the '536 reexamination is

those of claims 45 and 63 are identical.

The recited elements of the claim 1 "system" for use with a high frequency power supply and an electrically conducting fluid supply include an electrosurgical probe, a return electrode, and a fluid delivery element. The probe comprises a shaft having proximal and distal ends, an electrode terminal disposed near the distal end of the shaft, and a connector near the proximal end of the shaft. The connector electrically couples the electrode terminal to the electrosurgical power supply, whereas the return

patent reads as follows:

21. A hiopsy needle for use with a tissue sampling device having a housing with a forward end, a first slide mounted for longitudinal motion within said housing, and a second slide mounted for longitudinal motion within said housing, said bloopsy needle comprising.

Id. at 1229. The Court noted that:

H3 Systems has incorrectly construed the claim preamble. A preamble may serve a variety of purposes, depending on its content. It may limit the scope of the claim, for example when patentability depends on limitations stated in the preamble, as in In re Stencel, 928 F.2d 751, 754, 4 USBQ2d 1071, 1073 [Fed.Cir. 1987], or when the primable contributes to the definition of the claimed invention, as in Bell Communications Research, Inc. v. Witalink Communications Corp., 55 F.3d 615, 620, 34 USBQ2d 1816, 1820 [Fed.Cir. 1985]. In this case, however, the preamble simply states the intended use or purpose of the invention, as in Loctific Corp. v. Wiltness! Lite., 761 F.2d 661, 566, 228 USFQ 09, 94 [Fed. Cir. 1985]. Such a preamble usually does not limit the acope of the claim unless the preamble provides antecedents for ensuing claim terms and limits the claim scorodingly. In Vaspel Textilmanchinen KG v. Meccanica Ergo Italia, 51.P.A., 944 F.2d 870, 860, 20 USFQ2d 1045, 1053 [Fed.Cir. 1991], for example, the preamble described a Testence point That provided guidance in understanding and construing the Claim.

In the case at bar, the pressble of claim 21 recites the portion and structure of the qua housing into which the needle fit, and provides reference points in the que that aid in defining the needles as set forth in the body of the claim. HS systems is incorrect in stating that the pressble must contain details of the integrated mechanical cocking structure, for the gun structure is not part of the separate claims to the needles. The question of anticipation of the '056 claims relates to the needles, not the gun.

an electrically conducting fluid supply for directing	Reference No. 23 discloses an electrically
electrically conducting fluid to the target site such	conducting fluid supply for directing electrically
that	conducting fluid to the target site, see, e.g., col. 2,
	lines 42-68; col. 3, line 66.
the electrically conducting fluid generates a current	In Reference No. 23 the electrically conducting
flow path between the return electrode and the	fluid generates a current flow path between the
electrode terminal.	return electrode and the electrode terminal, see, e.g.
	col. 2, lines 42-68; col. 3, lines 34-38,
	Simin etal.
The '536 Patent	Reference No. 24
45. An electrorurgical system for applying electrical	Neterence 110, 24
energy to a target site on a structure within or on a	·
patient's body, the system comprising:	
a high frequency power supply;	Reference No. 24 discloses a high frequency power
	supply, sec, e.g., p. 1425.
an electrosurgical probe comprising a shaft having a	Reference No. 24 discloses an electrosurgical probe
proximal end and a distal end,	comprising a shaft having a proximal end and a
	distal end, see, e.g., p. 1425.
an electrode terminal disposed near the distal end,	Reference No. 24 discloses an electrode terminal
and	disposed near the distal end, see, e.g., p. 1425.
a connector near the proximal end of the shaft	Reference No. 24 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrosurgical power supply;	electrode terminal to the electrosurgical power
	supply, see, e.g., p. 1425.
a return electrode electrically coupled to the	Reference No. 24 discloses a return electrode
electrosurgical power supply; and	electrically coupled to the electrosurgical power
	supply, sec, e.g., p. 1425.
an electrically conducting fluid supply for directing	Reference No. 24 discloses an electrically
electrically conducting fluid to the target site such	conducting fluid supply for directing electrically
that	coodscring fluid to the torget she, see, e.g., p. 1425.
the electrically conducting fluid generates a current	In Reference No. 24 the electrically conducting
flow path between the return electrode and the	third generates a current flow path between the
electrode terminal.	return electrode and the electrode terminal, ace, e.g.,
	p. 1425.
Pansan et al	
The '536 Patent	Reference No. 25
45. An electrosurgical system for applying electrical	
energy to a target site on a structure within or on a	
patient's body, the system comprising:	
a high frequency power supply:	Reference No. 25 discloses a high frequency power
a men medicate) hower supply.	supply, see, e.g., p. 99.
an electrosurgical probe comprising a shall having a	Reference No. 25 discloses an electrosurgical probe
proximal end and a distal end.	comprising a shaft having a proximal end and a
proximen end and a order end,	
The state of the s	distal end, see, e.g., p. 99.
an electrode terminal disposed near the distal end,	Reference No. 25 discloses an electrode terminal
	disposed near the distal end, see, e.g., p. 99.
a connector near the proximal end of the shaft	Reference No. 25 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shaft electrically coupling the
electrosurgical power supply;	electrode terminal to the electrosurgical power
	supply, soc. e.g., p. 99.
a teturn electrode electrically coupled to the	Reference No. 25 discloses a return electrode .
electrosurgical power supply; and	electrically coupled to the electrosurgical power
	supply are a s. p. 90

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that	conducting fluid to the target site, see, e.g., col. J.
	lines 48-53. · ·
the electrically conducting fluid generates a current	In Reference No. 27 the electrically conducting
flow path between the return electrode and the .	fluid generates a current flow path between the
electrode terminal.	return electrode and the electrode terminal, see, e.
	col. 3, lines 48-53.
	4590934
The '536 Patent	Reference No. 28
45. An electrosurgical system for applying electrical	
energy to a target site on a consener within or on a	1
patient's body, the system comprising: a high frequency power supply;	Reference No. 28 discloses a high frequency power
* rolly medicated bowin subbit.	supply, see, e.g., col. 2, lines 23-33,
an electrosurgical probe comprising a shall having a	Reference No. 28 discloses an electromargical prob
proximal end and a distal end.	comprising a shaft baving a proximal and and a
processors and a sound story	distal end, icc, e.g., col. 2, lines 23-33.
an electrode terminal disposed near the distal end,	Reference No. 28 discloses an electrode terminal
and I	disposed near the distal end, see, e.g., eol. 2, lines
	23-33.
a connector near the proximal end of the shaft	Reference No. 28 discloses a connector near the
electrically coupling the electrode terminal to the	proximal end of the shall electrically coupling the
electronurgical power supply;	electrode terminal to the electrosurgical power
	rupply, see, e.g., col. 2, lines 23-33. Reterence No. 21 discloses a return electrode
tehrn electrode electrically coupled to the electrostergical power supply; and	electrically coupled to the electrosurrical power
electrostergical power suppry; and	supply, see, e.g., col. 2, lines 23-33.
an electrically conducting fluid supply for directing	Reference No. 28 discloses an electrically
electrically conducting fluid to the target site such	conducting fluid supply for directing electrically
that	conducting fluid to the target site, see, e.z., col. Z.
	line 18.
the electrically conducting fluid generates a current	in Reference No. 28 the electrically conducting .
flow path between the return electrode and the	fluid generates a current flow path between the
electrode terminal.	return electrode and the electrode terminal, see, e. p
	col. 2, line 18.
The '536 Patent	Reference Na. 29
15. An electrosure ical system for applying electrical	, , , , , , , , , , , , , , , , , , ,
energy to a larger tite on a structure within or on a), .
satient's body, the system comprising:	
high frequency power supply;	Reference No. 29 discloses a high frequency power
	supply, see, e.g., p, 67-68.
in electrosingical probe comprising a shaft having a	Reference No. 29 discloses an electrosurgical prob
woximal cod and a distal end.	comprising a shaft having a proximal end and a
	distal and, sec. e.g., p. 67-68.
n electrode terminal disposed near the distal end,	Reference No. 29 discloses an electrode terminal
nd	disposed near the distal end, see, e.g., p. 67-68.
equinocitis near the proximal end of the shaft	Reference No. 29 discloses a connector near the
lectrically coupling the electrode terminal to the	proximal and of the shaft electrically coupling the
lectrosurgical power supply;	electrode terminal to the electrosurgical power
	supply, see, e.g., p. 67-68.
return electrode electrically coupled to the	Reference No. 29 discloses a return electrode

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